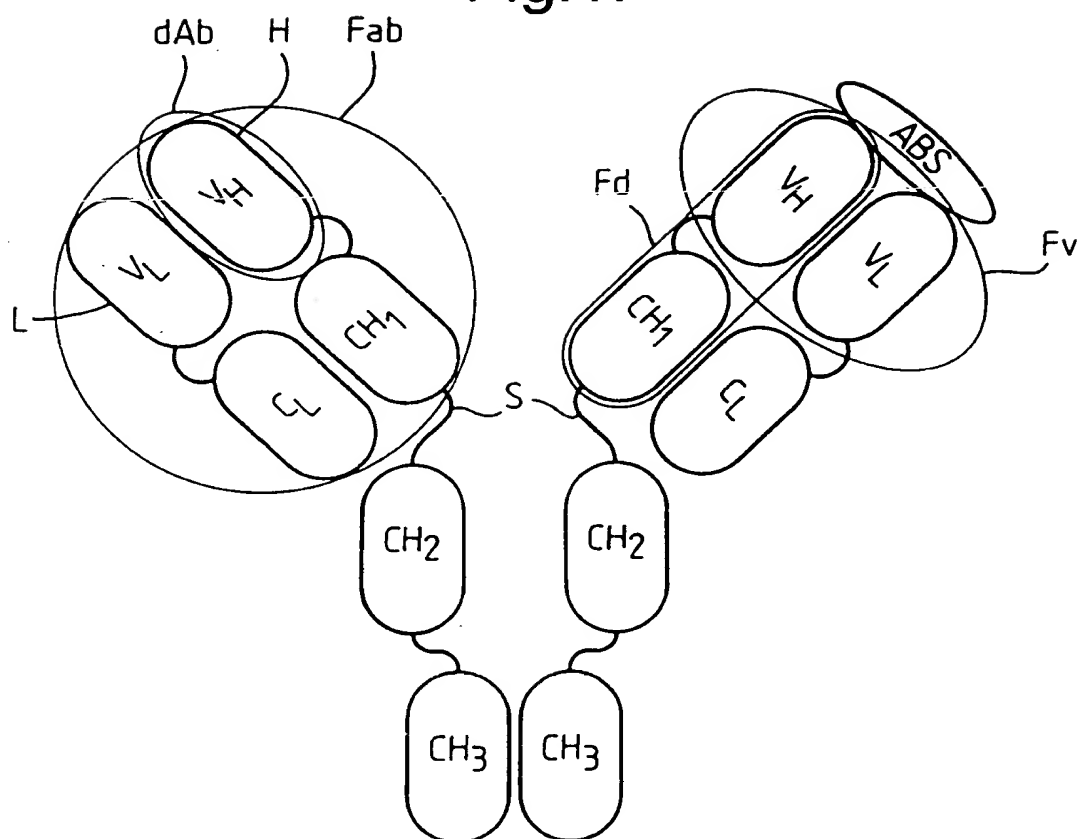


Fig.1.



A diagram of a particle represented by a circle with a vertical line passing through its center. The letter 'P' is placed to the left of the line, and the letter 'm' is placed below the circle.

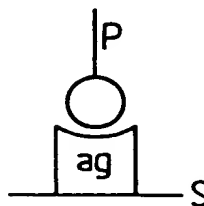
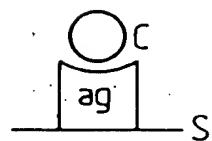
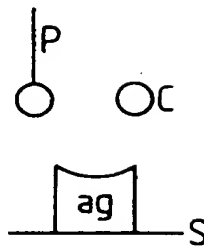
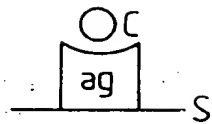
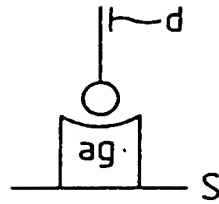
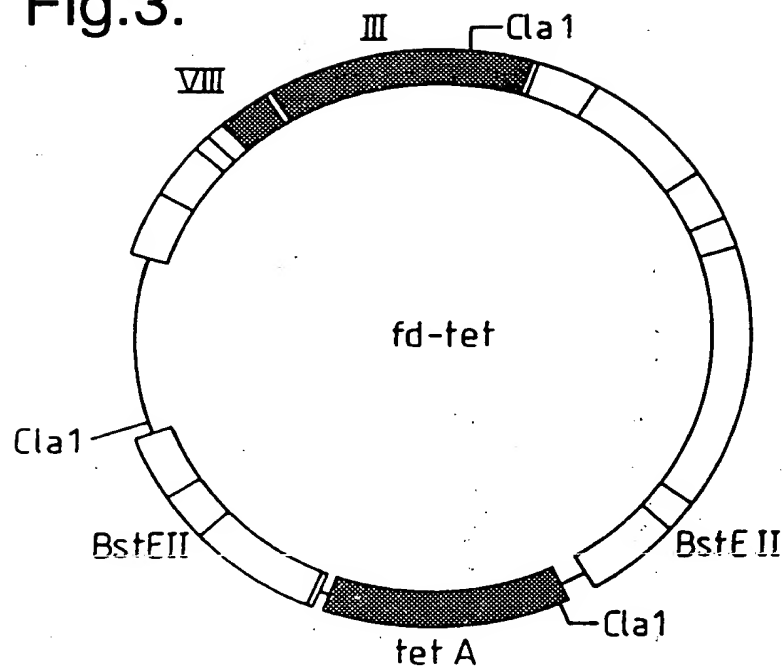
[illegible]

Fig.3.



fd - tet

~

cleave with BstEII

~

fill in with Klenow

~

re-ligate

↓

FDTδBst

~

in vitro mutagenesis (oligo 1)

↓

FDTPs/Bs

~

in vitro mutagenesis (oligo 2)

↓

FDTPs/Xh

66021 22990160

(1653)
 Oligo 1 ACA ACT TTC AAC AGT TGA GGA GAC GGT GAC CGT AAG CTT CTG CAG TTG GAC CTG AGC
 GGA GTG AGA ATA (1620)
 (1653)
 Oligo 2 ACA ACT TTC AAC AGT TTC CCG TTT GAT CTC GAG CTC CTG CAG TTG GAC CTG
 (1704)
 Oligo 3 GTC GTC TTT CCA GAC GTT AGT

Fig.4 (i).

GENE III
 GENE III
 SIGNAL
 CLEAVAGE SITE
 (1624)
 A TCT CAC TCC GCT
 Q V Q L Q V T V S S
 B TCT CAC TCC GCT CAG GTC CAA CTG CAG AAG CTT ACC GTC ACC GTC TCC TCA ACT GTT GAA AGT
 PstI BstEII
 Q V Q L Q L E I K R
 C TCT CAC TCC GCT CAG GTC CAA CTG CAG GAG CTC GAG ATC AAA CGG GAA ACT GTT GAA AGT
 PstI XhoI
 (1650)
 GAA ACT GTT GAA AGT

Fig.4 (ii).

Fig.5.

rbs M K Y L L P T A A
 GCATGCAAATTCTATTTCAAGGAGACAGTCATAATGAAATACCTATTGCCTACGGCAGCC
 10 20 30 40 50 60
 SphI
 PelB leader
 A G L L L L A A O P A M A Q V Q L Q E S
 GCTGGATTGTTATTACTCGCTGCCCAACCAGCGATGGCCCAGGTGCAGCTGCAGGAGTCA
 70 80 90 100 110 120
 PstI
 G P G L V A P S Q S L S I T C T V S G F
 GGACCTGGCCTGGTGGCGCCCTCACAGAGCCTGTCCATCACATGCACCGTCTCAGGGTTC
 130 140 150 160 170 180
 S L T G Y G V N W V R Q P P G K G L E W
 TCATTAACCGGCTATGGTGTAAACTGGGTTCCGCCAGCCTCCAGGAAAGGGTCTGGAGTGG
 190 200 210 220 230 240
 VHD1.3
 L G M I W G D G N T D Y N S A L K S R L
 CTGGGAATGATTTGGGGTGATGGAAACACAGACTATAATTCAGCTCTCAAATCCAGACTG
 250 260 270 280 290 300
 S I S K D N S K S Q V F L K M N S L H T
 AGCATCAGCAAGGACAACCTCCAAGAGCCAAGTTTTCTTAAAAATGAACAGTCTGCACACT
 310 320 330 340 350 360
 D D T A R Y Y C A R E R D Y R L D Y W G
 GATGACACAGCCAGGTACTACTGTGCCAGAGAGAGAGATTATAGGCTTGACTACTGGGGC
 370 380 390 400 410 420
 Linker Peptide
 Q G T T V T V S S G G G G S G G G G S G
 CAAGGCACCAACGGTACCGTCTCCTCAggtggaggcggttcaggcgaggtggctctggc
 430 440 450 460 470 480
 BstEII
 G G G S D I E L T Q S P A S L S A S V G
 ggtggcggtatcgGACATCGAGCTCACTCAGTCTCCAGCCTCCCTTTCTGCGTCTGTGGGA
 490 500 510 520 530 540
 SacI

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Fig.5 (Cont).

E T V T I T C R A S G N I H N Y L A W Y
GAAACTGTCACCATCACATGTCGAGCAAGTGGGAATATTTCACAATTATTTAGCATGGTAT
550 560 570 580 590 600

Q Q K Q G K S P Q L L V Y Y T T T L A D
CAGCAGAAACAGGGAAAATCTCCTCAGCTCCTGGTCTATTATACAACAACCTTAGCAGAT
610 620 630 640 650 660

VKD1.3

G V P S R F S G S G S G T Q Y S L K I N
GGTGTGCCATCAAGGTTTCAGTGGCAGTGGATCAGGAACACAATATTCTCTCAAGATCAAC
670 680 690 700 710 720

S L Q P E D F G S Y Y C Q H F W S T P R
AGCCTGCAACCTGAAGATTTTGGGAGTTATTACTGTCAACATTTTGGAGTACTCCTCGG
730 740 750 760 770 780

Myc Tag (TAG1)

T F G G G T K L E I K R E O K L I S E E
ACGTTCCGGTGGAGGGACCAAGCTCGAGATCAAACGGGAACAAAACTCATCTCAGAAGAG
790 800 810 820 830 840

XhoI

D L N * *
GATCTGAATTAAATAATGATCAAACGGTAATAAGGATCCAGCTCGAATTC
850 860 870 880

EcoRI

Fig.6.

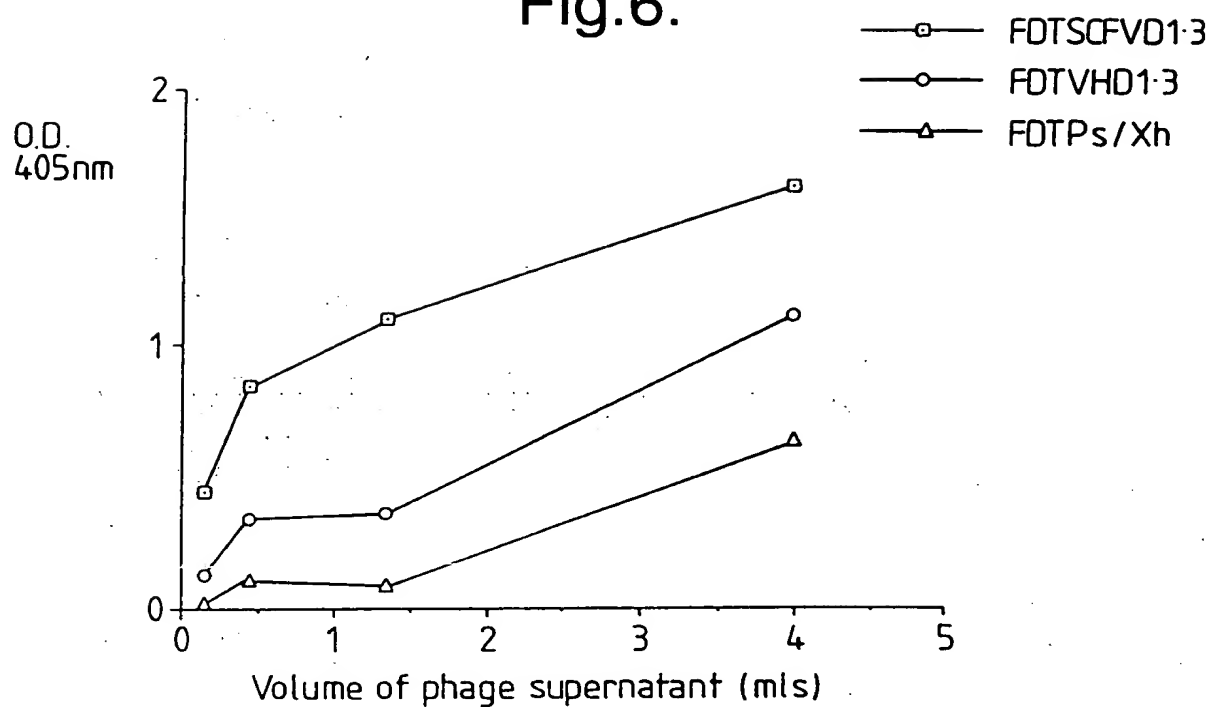


Fig.7.

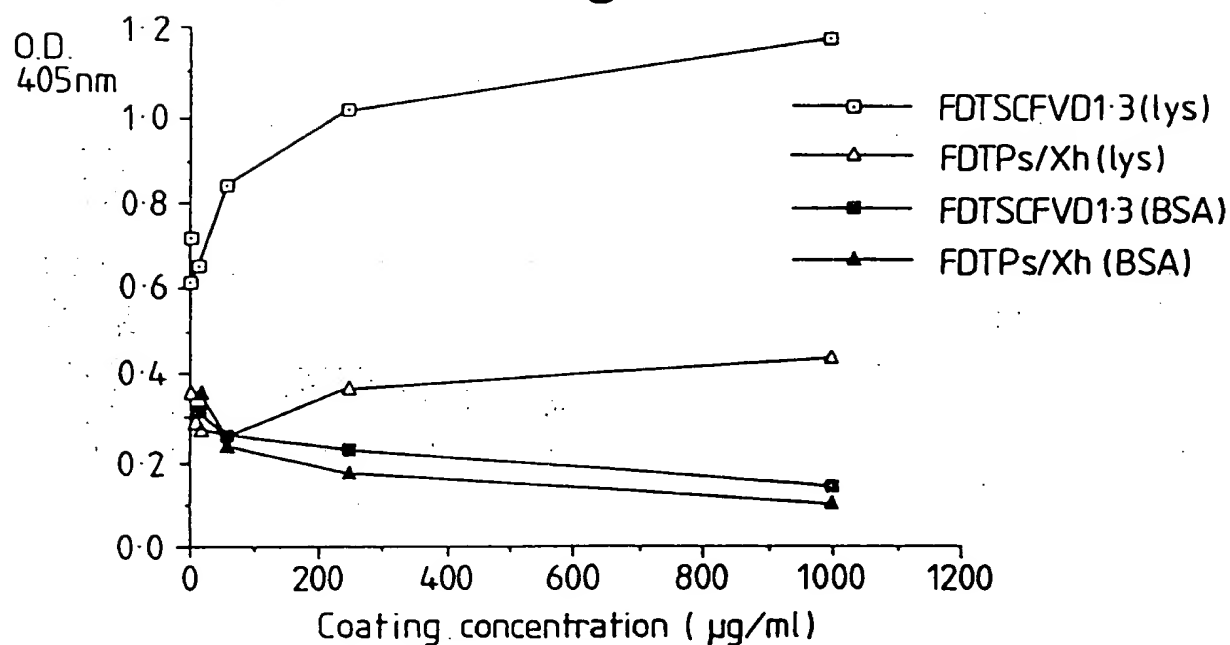


Fig.8.

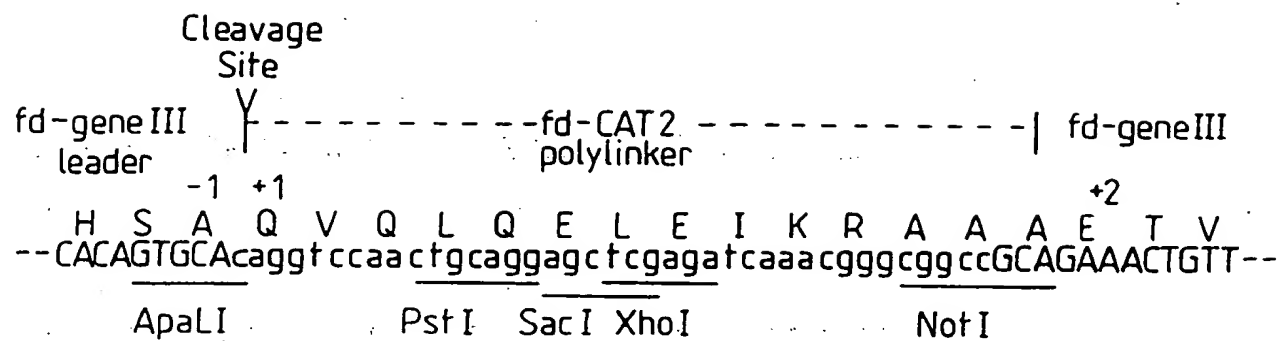


Fig.9.

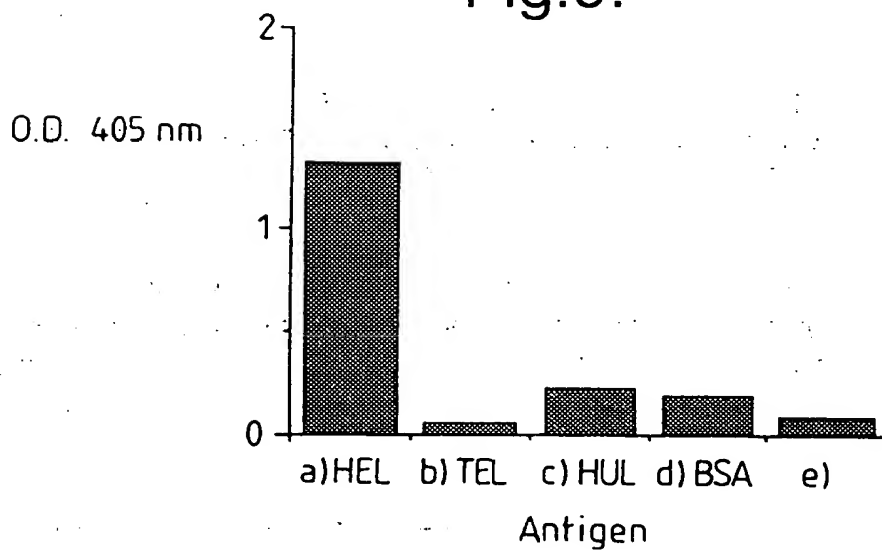


Fig.10.

M K Y L L P T A A
 GCATGCAAATTCCTATTTCAAGGAGACAGTCATAATGAAATACCTATTGCCTACGGCAGCC
 10 20 30 40 50 60

 A G L L L L A A Q P A M A Q V Q L Q E S
 GCTGGATTGTTATTACTGCTGCCCAACCAGCGATGGCCCAAGTGCAGCTGCAGGAGTCA
 70 80 90 100 110 120

 G P G L V A P S Q S L S I T C T V S G F
 GGACCTGGCCTGGTGGCGCCCTCACAGAGCCTGTCCATCACATGCACCGTCTCAGGGTTC
 130 140 150 160 170 180

 S L T G Y G V N W V R Q P P G K G L E W
 TCATTAACCGGCTATGGTGTAACTGGGTTCGCCAGCCTCCAGGAAAGGGTCTCGAGTGG
 190 200 210 220 230 240

 L G M I W G D G N T D Y N S A L K S R L
 CTGGGAATGATTTGGGGTGATCGAAACACAGACTATAATTACAGCTCTCAAATCCAGACTG
 250 260 270 280 290 300

 S I S K D N S K S Q V F L K M N S L H T
 AGCATCAGCAAGGACAACCTCCAAGAGCCAAGTTTTCTTTAAAAATGAACAGTCTGCACACT
 310 320 330 340 350 360

 D D T A R Y Y C A R E R D Y R L D Y W G
 GATGACACAGCCAGGTACTACTGTGCCAGAGAGAGAGATTATAGGCTTGACTACTGGGGC
 370 380 390 400 410 420

 Q G T T V T V S S A S T K G P S V F P L
 CAAGGCACCAAGGTACCGTCTCCTCAGCCTCCACCAAGGGCCCATCGGTCTTCCCCCTG
 430 440 450 460 470 480

 A P S S K S T S G G T A A L G C L V K D
 GCACCCCTCCTCCAAGAGCACCTCTGGGGGCACAGGGCCCTGGGCTGCCTGGTCAAGGAC
 490 500 510 520 530 540

Fig.10 (Cont 1).

Y F P E P V T V S W N S G A L T S G V H
TACTTCCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGCGCCCTGACCAGCGGGGTGCAC
550 560 570 580 590 600

T F P A V L Q S S G L Y S L S S V V T V
ACCTTCCCCGGCTGTCTACAGTCTCTAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTG
610 620 630 640 650 660

P S S S L G T Q T Y I C N V N H K P S N
CCCTCCAGCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAAC
670 680 690 700 710 720

T K V D K K V E P K S S * *
ACCAAGGTGACAAGAAAGTTGAGCCCAATCTTCAATAAACC CGGAGCTTGCATGCA
730 740 750 760 770 780

M K Y L L P T A A A G L
AATTCTATTTCAAGGAGACAGTCATAATGAAATACCTATTGCCCTACGGCAGCCGCTGGAT
790 800 810 820 830 840

L L L A A Q P A M A D I E L T Q S P A S
TGTTATTACTGCTGCCCCAACCAGCGATGGCCGACATCGAGCTACCCAGTCTCCAGCCT
850 860 870 880 890 900

L S A S V G E T V T I T C R A S G N I H
CCCTTTCTGGGTCTGTGGGAGAACTGTCAACATCACATGTGAGCAAGTGGGAATATTC
910 920 930 940 950 960

N Y L A W Y Q Q K Q G K S P Q L L V Y Y
ACAATTATTTAGCATGGTATCAGCAGAAACAGGGAAAATCTCCTCAGCTCCTGGTCTATT
970 980 990 1000 1010 1020

Fig.10 (Cont 2).

T T T L A D G V P S R F S G S G S G T Q
ATACAACAACCTTAGCAGATGGTGTGCCATCAAGGTTTCAGTGGCAGTGGATCAGGAACAC
1030 1040 1050 1060 1070 1080

Y S L K I N S L Q P E D F G S Y Y C Q H
AATATTCTCTCAAGATCAACAGCCTGCAGCCTGAAGATTTTGGGAGTTATTACIGTCAAC
1090 1100 1110 1120 1130 1140

F W S T P R T F G G G T K L E I K R T V
ATTTTTGGGAGTACTCCTCGGACGTTGGGTGGAGGCACCAAGCTCGAGATCAAACGGACTG
1150 1160 1170 1180 1190 1200

A A P S V F I F P P S D E Q L K S G T A
TGGCTGCACCATCTGTCTTCATCTTCCCGCCATCTGATGAGCAGTTGAAATCTGGAACCTG
1210 1220 1230 1240 1250 1260

S V V C L L N N F Y P R E A K V Q W K V
CCTCTGTTGTGTGCTGTGAATAACTTCTATCCAGAGAGGCCAAAGTACAGTGGGAAGG
1270 1280 1290 1300 1310 1320

D N A L Q S G N S Q E S V T E Q D S K D
TGGATAACGCCCTCCAATCGGGTAACTCCAGGAGAGTGTACAGAGCAGGACAGCAAGG
1330 1340 1350 1360 1370 1380

S T Y S L S S T L T L S K A D Y E K H K
ACAGCACCTACAGCCTCAGCAGCACCCCTGACGCTGAGCAAAGCAGACTACGAGAAACACA
1390 1400 1410 1420 1430 1440

V Y A C E V T H Q G L S S P V T K S F N
AAGTCTACGCCCTGCGAAGTCAACCATCAGGGCCTGAGCTCGCCCGTCAAAAGAGCTTCA
1450 1460 1470 1480 1490 1500

R G E S * *
ACCGCGGAGAGTCATAGTAAGAATTC
1510 1520

0049567 E2956760

Fig.10 (Cont 3).

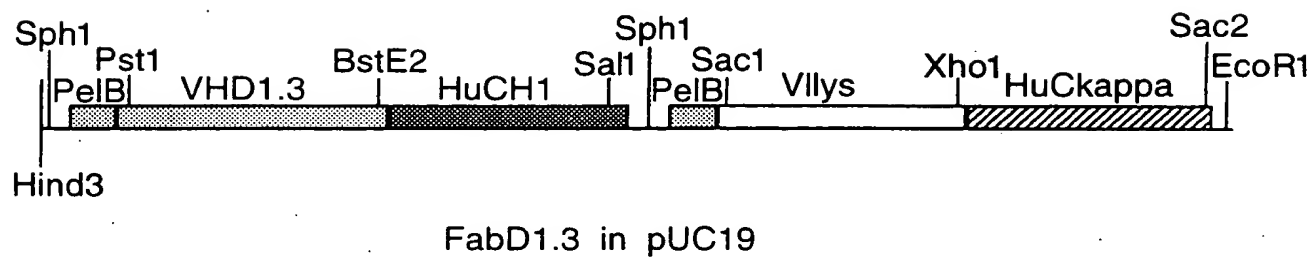


Fig.11.

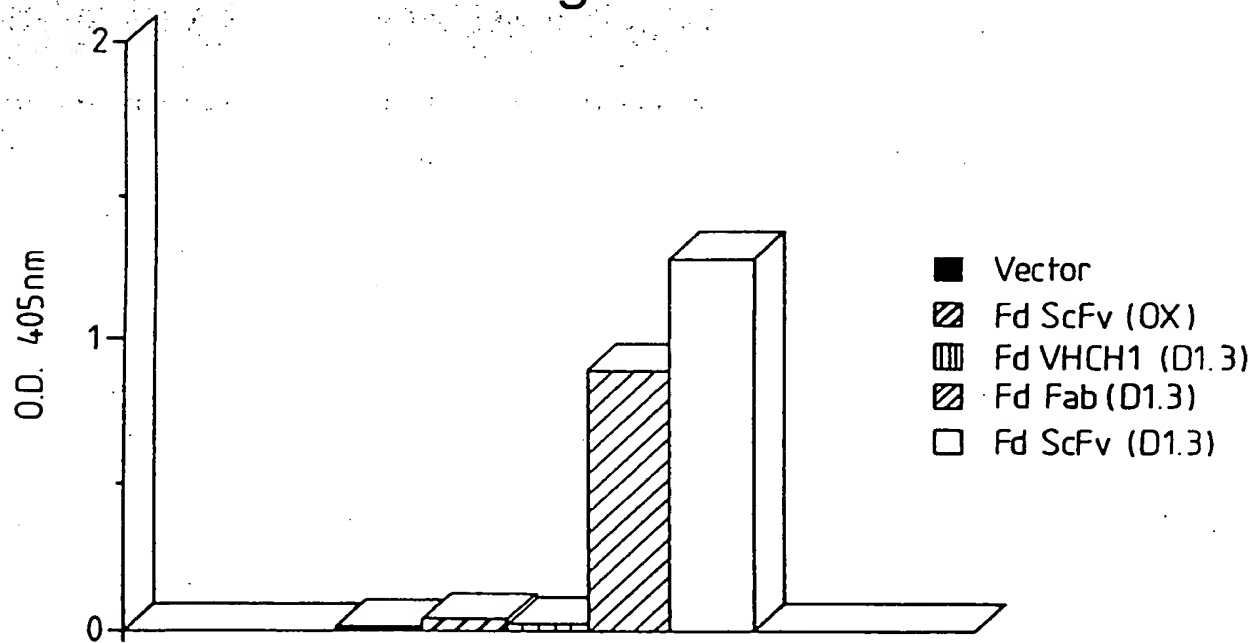


Fig.12a.

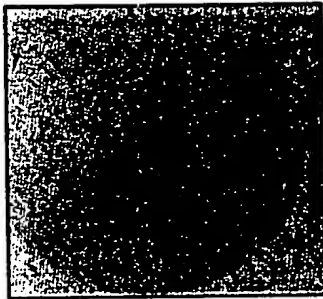


Fig.12b.

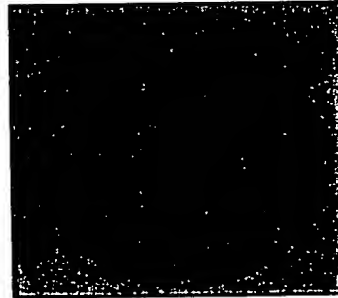


Fig.13.

Q V Q L Q E S G G G L V Q P G G
CAG GTG CAG CTG CAG GAG TCA GGA GGA GGC TTG GTA CAG CCT GGG GGT
PstI
S L R L S C A T S G F T F S N Y
TCT CTG AGA CTC TCC TGT GCA ACT TCT GGG TTC ACC TTC AGT AAT TAC
Y M G W V R Q P P G K A L E W L
TAC ATG GGC TGG GTC CGC CAG CCT CCA GGA AAG GCA CTT GAG TGG TTG
G S V R N K V N G Y T T E Y S A
GGT TCT GTT AGA AAC AAA GTT AAT GGT TAC ACA ACA GAG TAC AGT GCA
S V K G R F T I S R D N F Q S I
TCT GTG AAG GGG CGG TTC ACC ATC TCC AGA GAT AAT TTC CAA AGC ATC
L Y L Q I N T L R T E D S A T Y
CTC TAT CTT CAA ATA AAC ACC CTG AGA ACT GAG GAC AGT GCC ACT TAT
Y C A R G Y D Y G A W F A Y W G
TAC TGT GCA AGA GGC TAT GAT TAC GGG GCC TGG TTT GCT TAC TGG GGC
Q G T L V T v s s g g g g s g g g g s
CAA GGG ACC CTG GTC ACC gtc tcc tca ggtggaggcggttcaggcgagggtggctct
BstEII
g g g g s d i E L T Q T P L S L P V
ggcggtggcggtcgac atc GAG CTC ACC CAA ACT CCA CTC TCC CTG CCT GTC
SacI
S L G D Q A S I S C R S S Q S I
AGT CTT GGA GAT CAA GCC TCC ATC TCT TGC AGA TCT AGT CAG AGC ATT
V H S N G N T Y L E W Y L Q K P
GTA CAT AGT AAT GGA AAC ACC TAT TTA GAA TGG TAC CTG CAG AAA CCA
PstI
G Q S P K L L I Y K V S N R F S
GGC CAG TCT CCA AAG CTC CTG ATC TAC AAA GTT TCC AAC CGA TTT TCT
G V P D R F S G S G S G T D F T
GGG GTC CCA GAC AGG TTC AGT GGC AGT GGA TCG GGG ACA GAT TTC ACA
L K I S R V E A E D L G V Y Y C
CTC AAG ATC AGC AGA GTG GAG GCT GAG GAT CTG GGA GTT TAT TAC TGC
F Q G S H V P Y T F G G G T K L
TTT CAA GGT TCA CAT GTT CCG TAC ACG TTC GGA GGG GGG ACC AAG CTC
E I K R
GAG ATC AAA CGG
XhoI

03106673 413009

Fig.14.

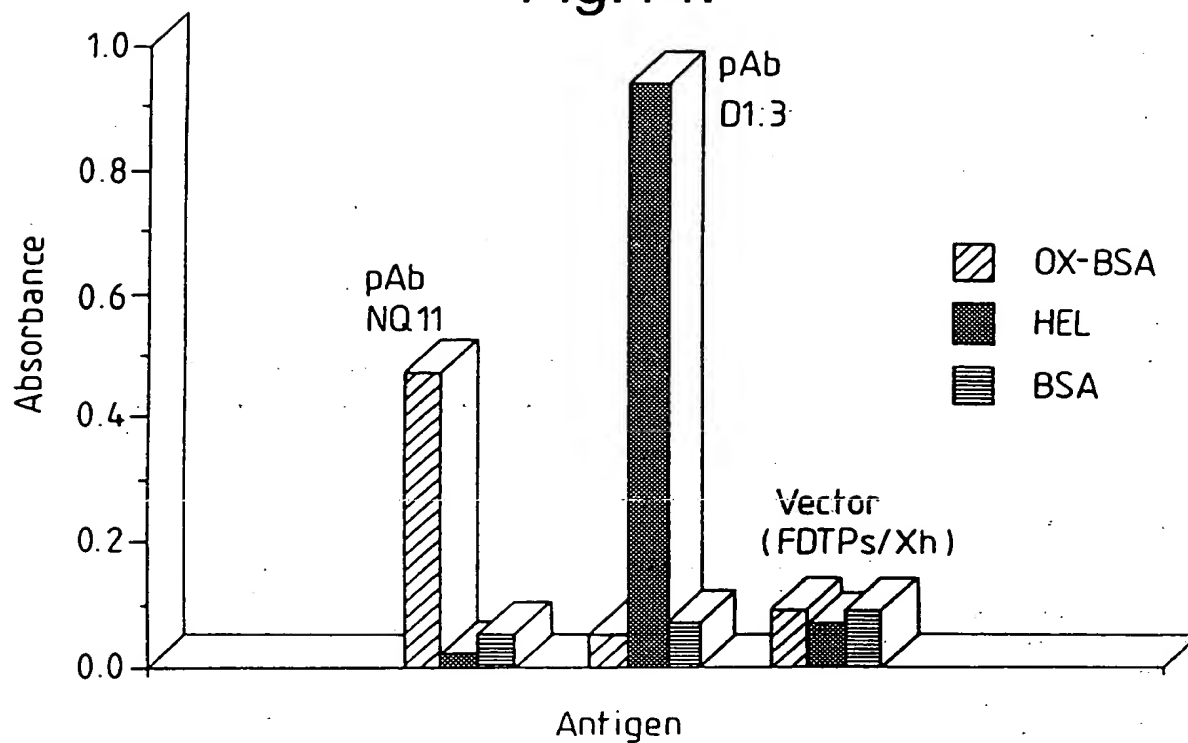


Fig.15.

5' END

TCT CAC AGT GCA CAA ACT GTT GAA CGG ACA CCA GAA ATG CCT GTT CTG
 ApaL1

3' END

K A A L G L K
 AAA GCC GCT CTG GGG CTG AAA GCG GCC GCA GAA ACT GTT GAA AGT etc.
 Not I

Fig.16 (i).

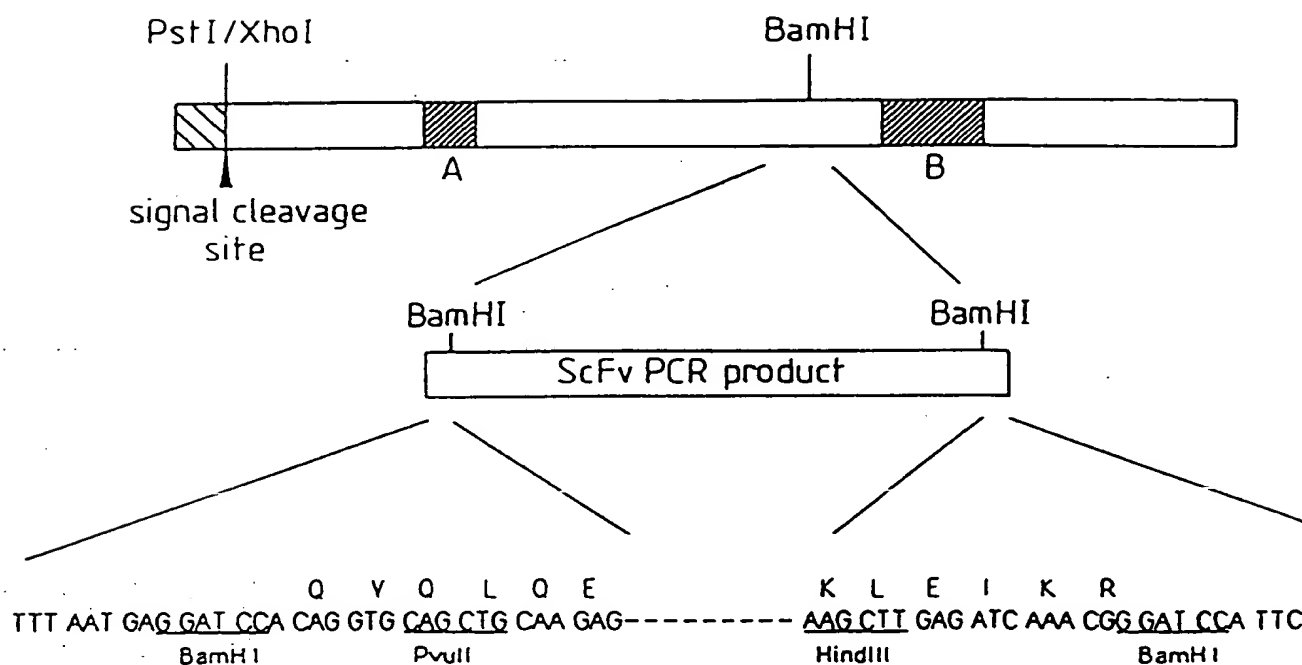


Fig.16 (ii).

A (1834) 5' GAG GGT GGT GGC TCT
 " " "C " "
 " " "C " "
 " " "C " ACT 3'(1839)

B (2284) 5' - GGC GGC GGC TCT
 - GGT GGT GGT "
 - " GGC GGC "
 GAG " " GGC "
 " " " GGT "
 " " " GGC "
 - " " GGT "
 - " " GGC " 3'(2379)

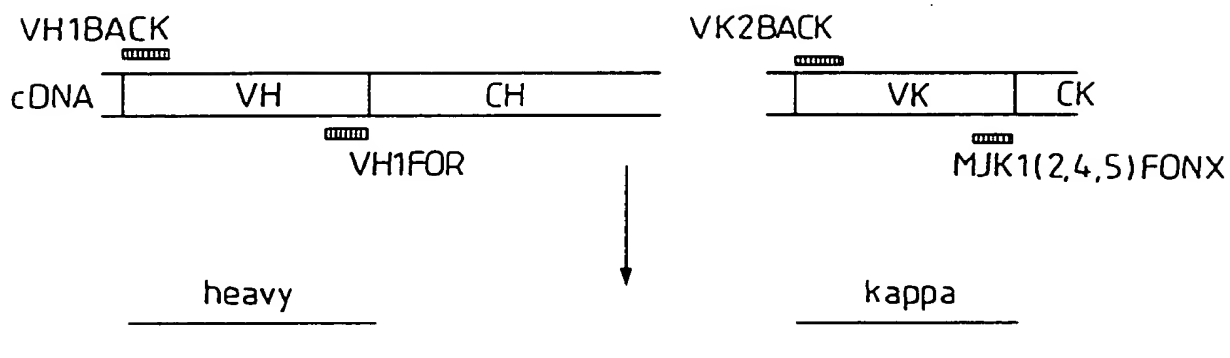
Reverse complement of mutagenic
 oligo G3Bamlink

5' GAG GGT GGC GGA TCC

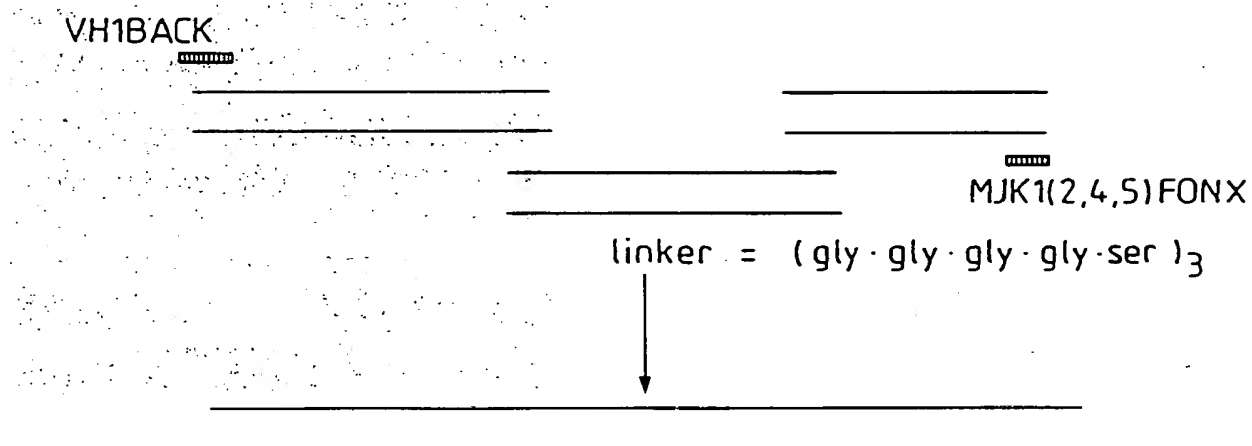
GAG GGT GGC GG 3'

1) PRIMARY PCR

Fig.17.



2) ASSEMBLY PCR



3) ADDING RESTRICTION SITES

VHBKAPA10

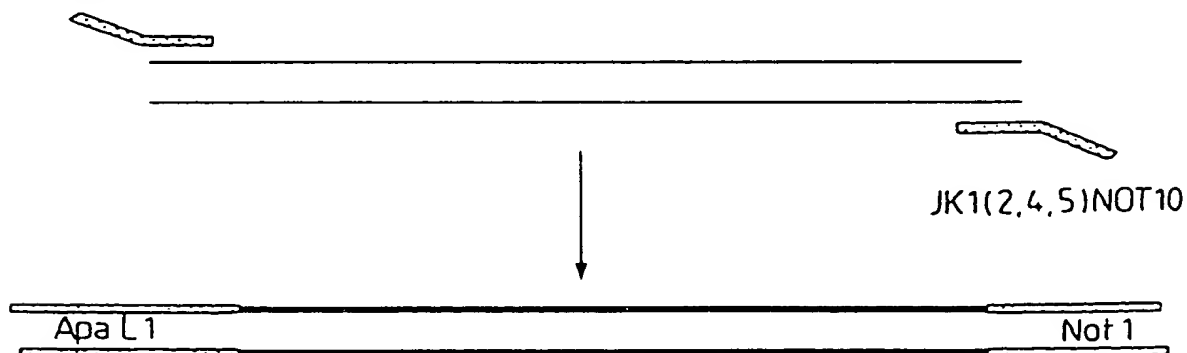


Fig.18.

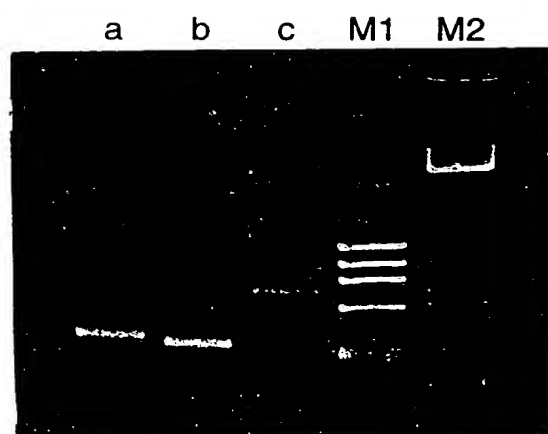


Fig.19.

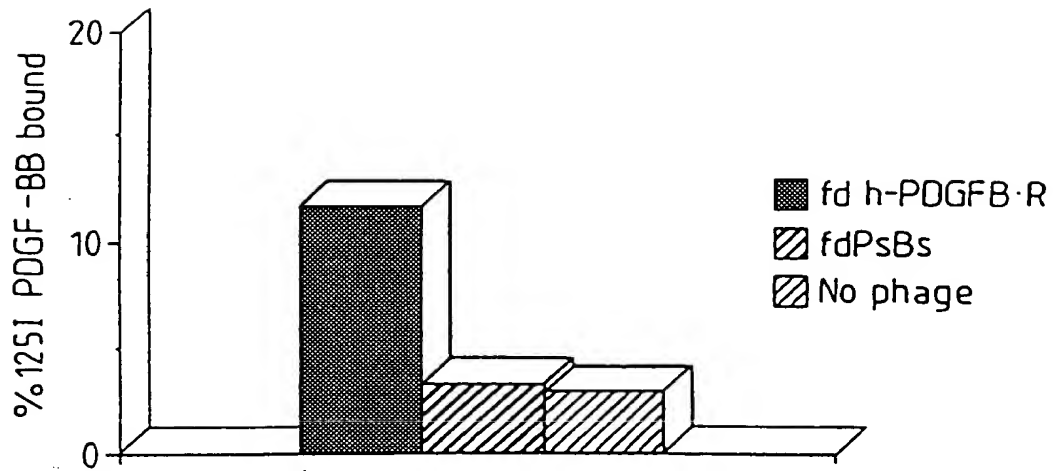
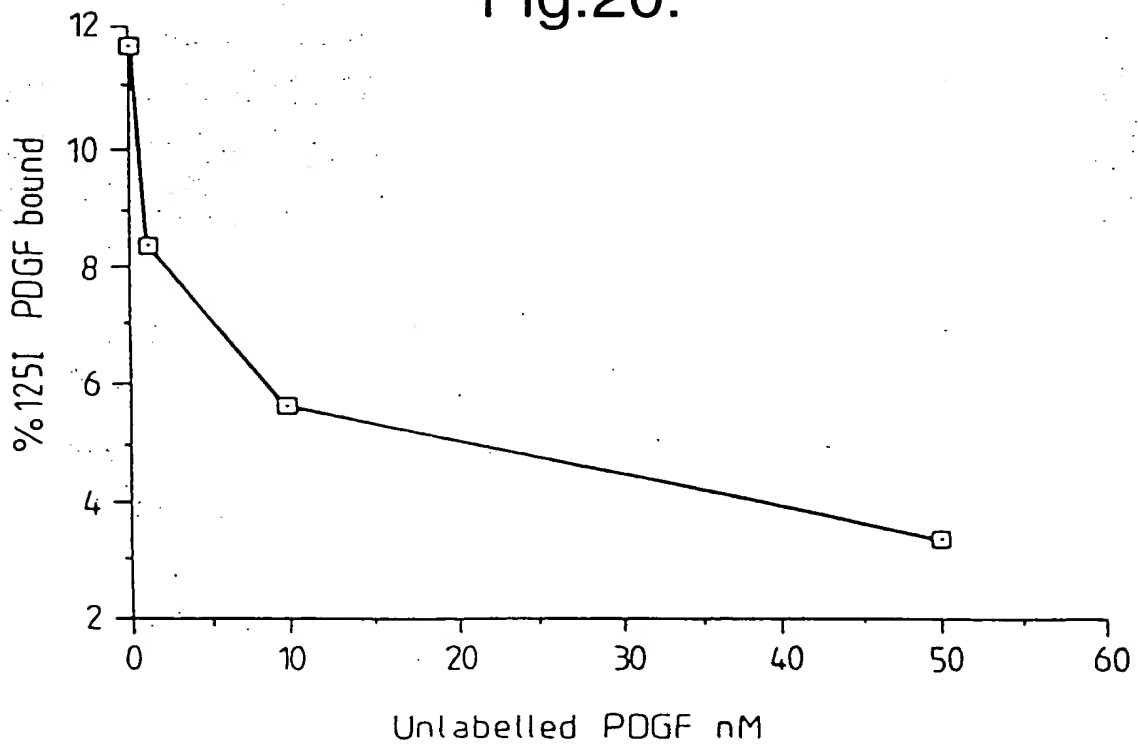
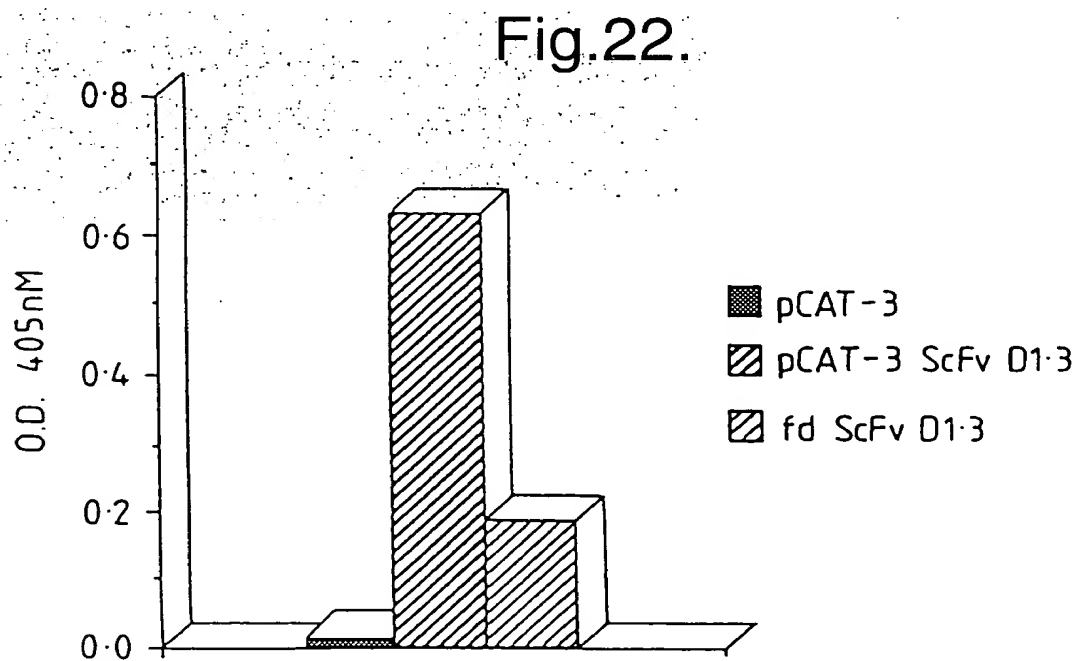
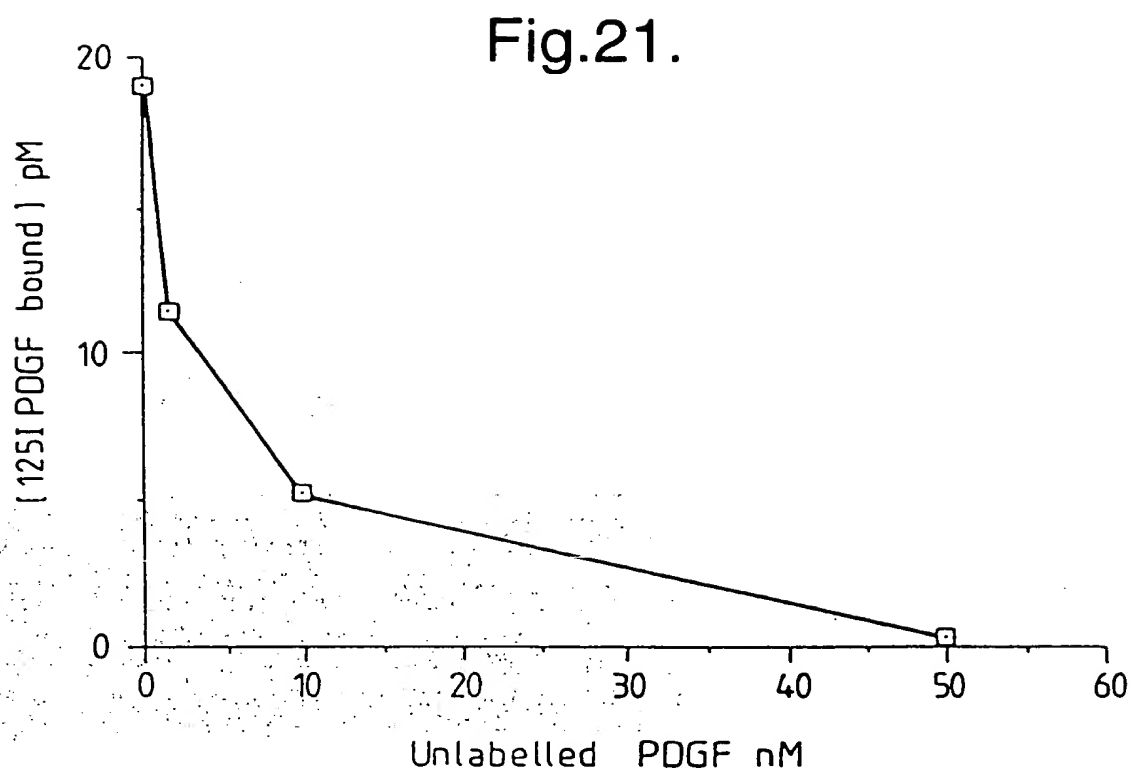


Fig.20.





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Fig.23(i)

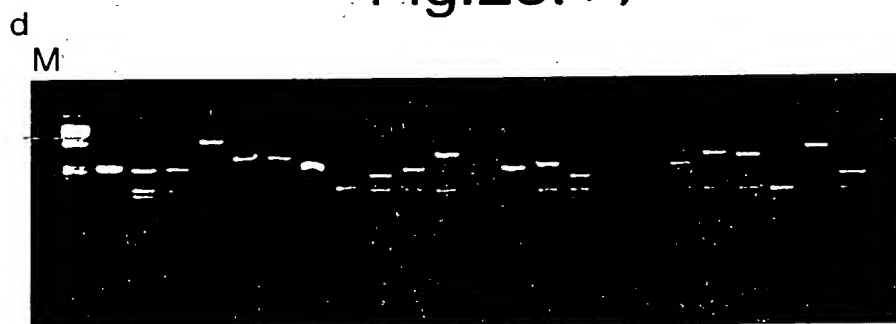


Fig.23(ii)

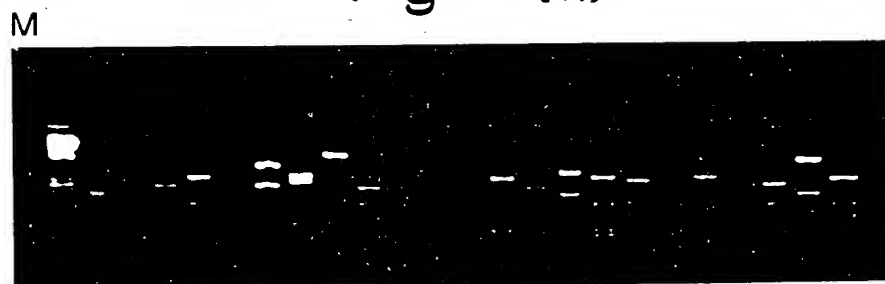


Fig.24.

VH sequences

from combinatorial library:

	CDR1		CDR2		CDR3	
A	QVQLQQSGAELARPGASVVKMSCKASGYTFT	WVKQRPQGLEWIG	YINPSSGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	RYGAY	HGQCTTAVTVSS x4 1
B	QVQLQQSGAELAKPGASVVKMSCKASGYTFT	MLKQRPQGLEWIG	YINPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	NYGLY	HGQCTTAVTVSS x9 1
C	QVQLQQSGPELVKPGASVVKMSCKASGYTFT	WVKQRPQGLEWIG	YINPNDGTYNEXKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	YRFPY	HGQCTTAVTVSS x3 1
D	QVQLQQSGPELVKPGASVVKISCKASGYST	WVKQSHCKSLEWIG	RINPYNODTFYNQKFKD	KATLTADKSSSTAHMELSLTSEDSAVYYCVG	ITTRFAY	HGQCTTAVTVSS x3 1
E	QVQLQESGPOLVAPQSLSITCTVBOFSLT	WVKQRPQGLEWIG	VIWAGSTNTNSALMS	RLSLISKDMSKQVFLQVNSLQTDDTANYYCAR	DRGDY	HGQCTTAVTVSS 2 VHOXJ
F	QVQLQESGPPELAKPGASVVKMSCKASGYTFT	WVKQRPQGLEWIG	YINPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS 1
G	QVQLQQSGAELVRPGASVVKLSCKASGYTFT	WVKQRPQGLEWIG	YINPSTGYTNYNQKFKD	EATLTADKSSNTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS 1
H	QVQLQQSGPELVKPGASVVKISCKASGYST	WVKQSHCKSLEWIG	YIAPFNGGTYTNYNQKFKG	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAT	DYGRD	HGQCTTAVTVSS 1

from hierarchical library VH-rep x Vκ-d:

I	QVQLQQSGPELARPASVVKMSCKASGYTFT	SYAMH	VISTYNGNTNYNQKFKD	KATLTADKSSSTAYMELARLTSEDSAVYYCAR	DYCDY	HGQCTTAVTVSS 1
J	QVQLQQSGAELARPASVVKMSCKASGYTFT	RYTMH	YINPSSGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DRGAY	HGQCTTAVTVSS 1
K	QVQLQQSGAELARPASVVKMSCKASGYTFT	RDMMH	YINPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	NYGLY	HGQCTTAVTVSS x3 1
L	QVQLQQSGLELAKPGASVVKMSCKASGYTFT	NYLMH	YINPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS x2 1
M	QVQLQQSGAELAKPGASVVKMSCKASGYTFT	NYNMH	YINPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS 1
N	QVQLQQSGAELVAPGASVVKLSCKTSGYTFT	SYTMH	YINPSSGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS 1
O	QVQLQQSGAELAKPGASVVKMSCKASGYTFT	SHLMH	YINPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS 1
P	QVQLQQSGAELAKPGASVVKMSCKASGYTFT	SYNMH	YINPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS 1
Q	QVQLQQSGAELAKPGASVVKMSCKATGYTFT	SILMH	YINPSSGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS 1
R	QVQLQQSGAELAKPGASVVKMSCKASGYTFT	SYTMH	YINPSSGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	NYGIY	HGQCTTAVTVSS x2 1
S	QVQLQQSGAELAKPGASVVKMSCKASGYTFT	TPLMH	YINPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS x6 1
T	QVQLQQSGAELARPASVVKMSCKASGYTFT	SYTMH	YINPSSGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS 1
U	QVQLQQSGAELAKPGASVVKMSCKASGYTFT	SYTMH	YIIPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	DYGY	HGQCTTAVTVSS 1
B	QVQLQQSGAELAKPGASVVKMSCKASGYTFT	RDMMH	YINPSTGYTNYNQKFKD	KATLTADKSSSTAYMQLSSLTSEDSAVYYCAR	NYGLY	HGQCTTAVTVSS 1

Fig.24 (Cont).

V κ sequences

from combinatorial library:

	CDR1	CDR2	CDR3		
a	DIETQSPSSLSASGGERVSLTC	WLQKPDGSIKRLIY	LOYASYPT	FGAGTKLEIKRA	x3 V ox-like
b	DIETQSPAIIHSAASGCKVTWC	WYQKSGASPKWIIY	QQYSGYPLT	FGAGTKLEIKRA	x3 IV ox-like
c	DIETQSPPTMAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	x3 IV ox-like
d	DIETQSPPTMAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	x9 IV ox-like
e	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	x4 VI ox-like?
f	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	VI Wox1
g	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	VI ox-like?

from hierarchical library VH-B x V κ -rep:

h	DIETQSPAIIHSAASGCKVTWC	WYQKSGTSPKRWIY	QQMSSNPLT	FGAGTKLEIKRA	x4 IV/VI Wox1
i	DIETQSPAIIHSAASGCKVTITC	WYQKPGFSPKLLIY	QQYHSYPLT	FGAGTKLEIKRA	V ox-like?
j	DIETQSPPTMAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
k	DIETQSPPTMAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
l	DIETQSPPTMAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
m	DIETQSPPTMAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
n	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
o	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
p	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
q	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
r	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
s	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
t	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
u	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
v	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like
w	DIETQSPAIIHSAASGCKITITC	WYQKPGFSPKLLIY	QQGSSIPLT	FGAGTKLEIKRA	V ox-like

001963 62936T60

Fig.25.

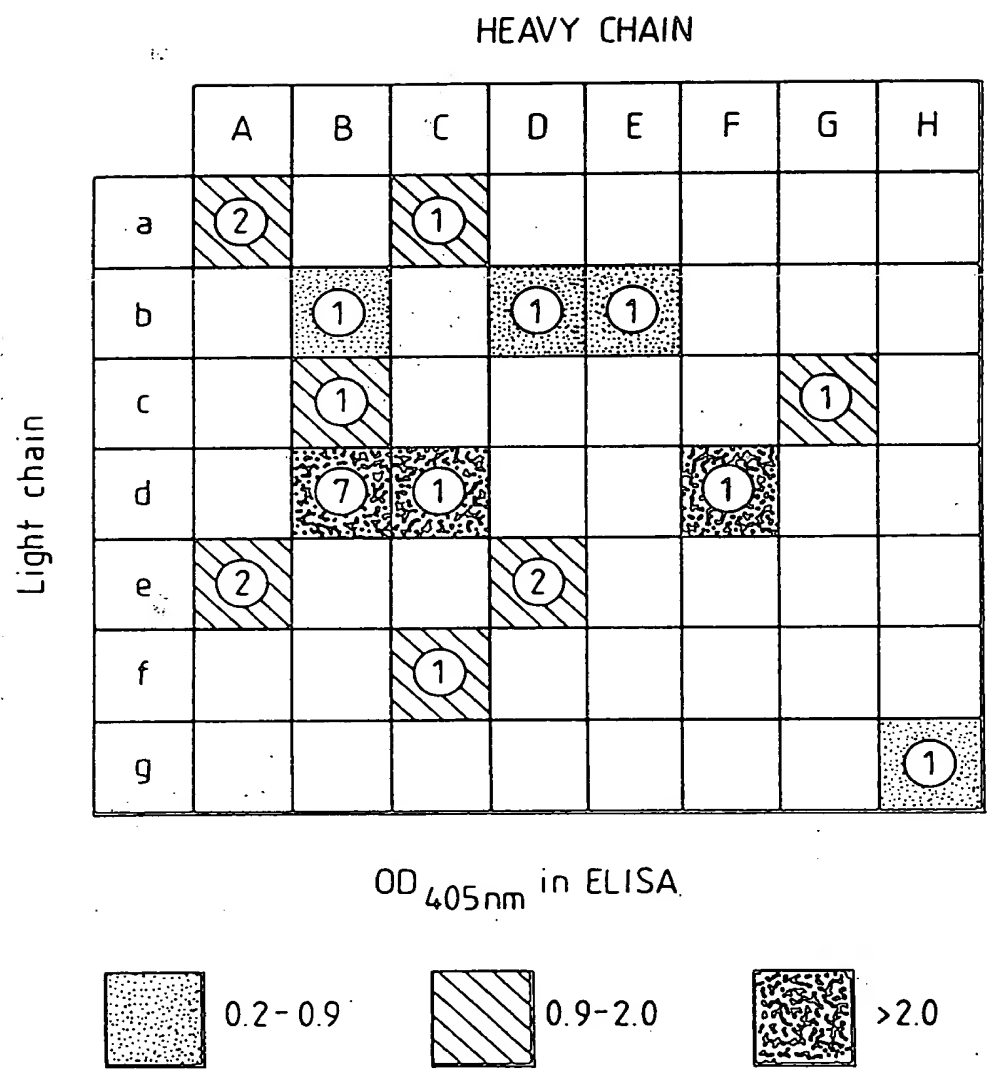


Fig.26(a).

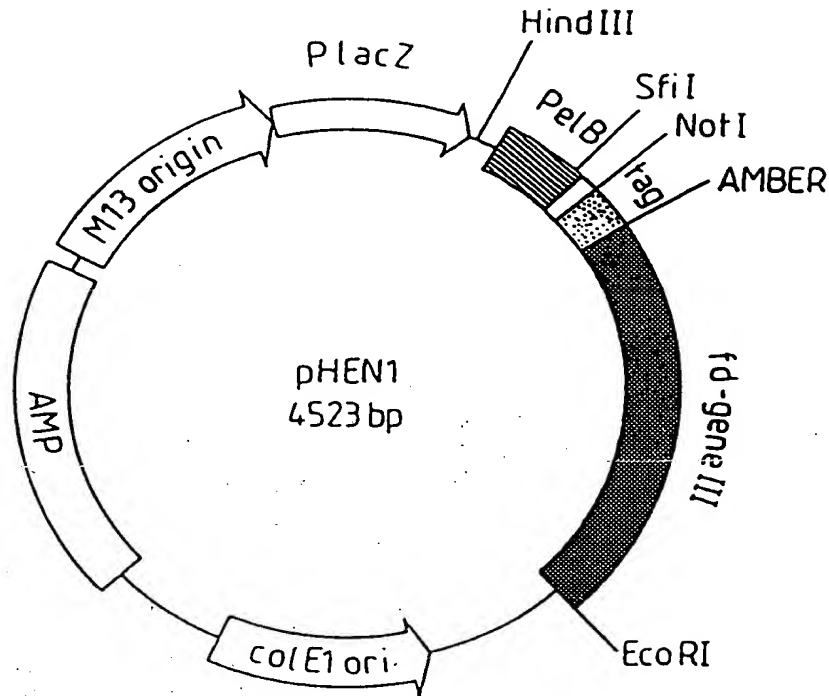


Fig.26(b).

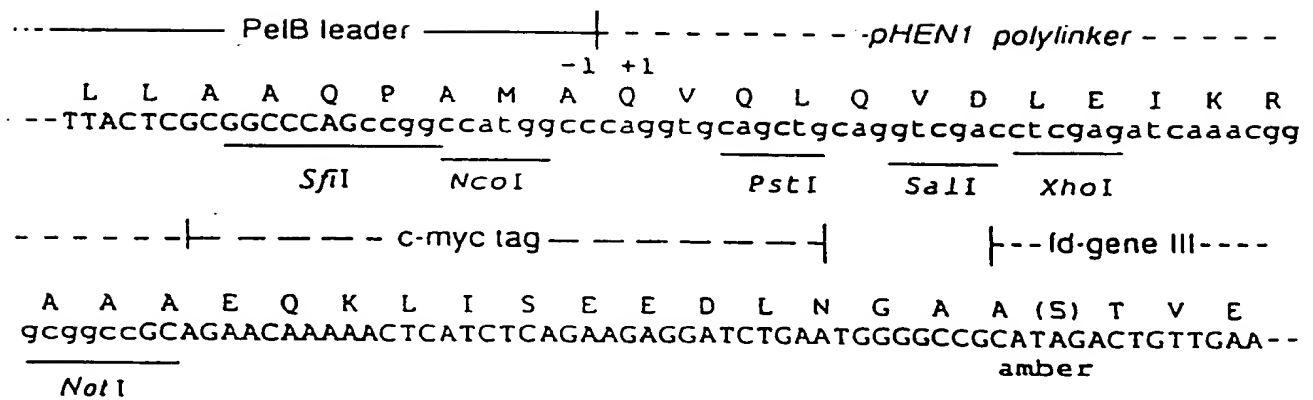
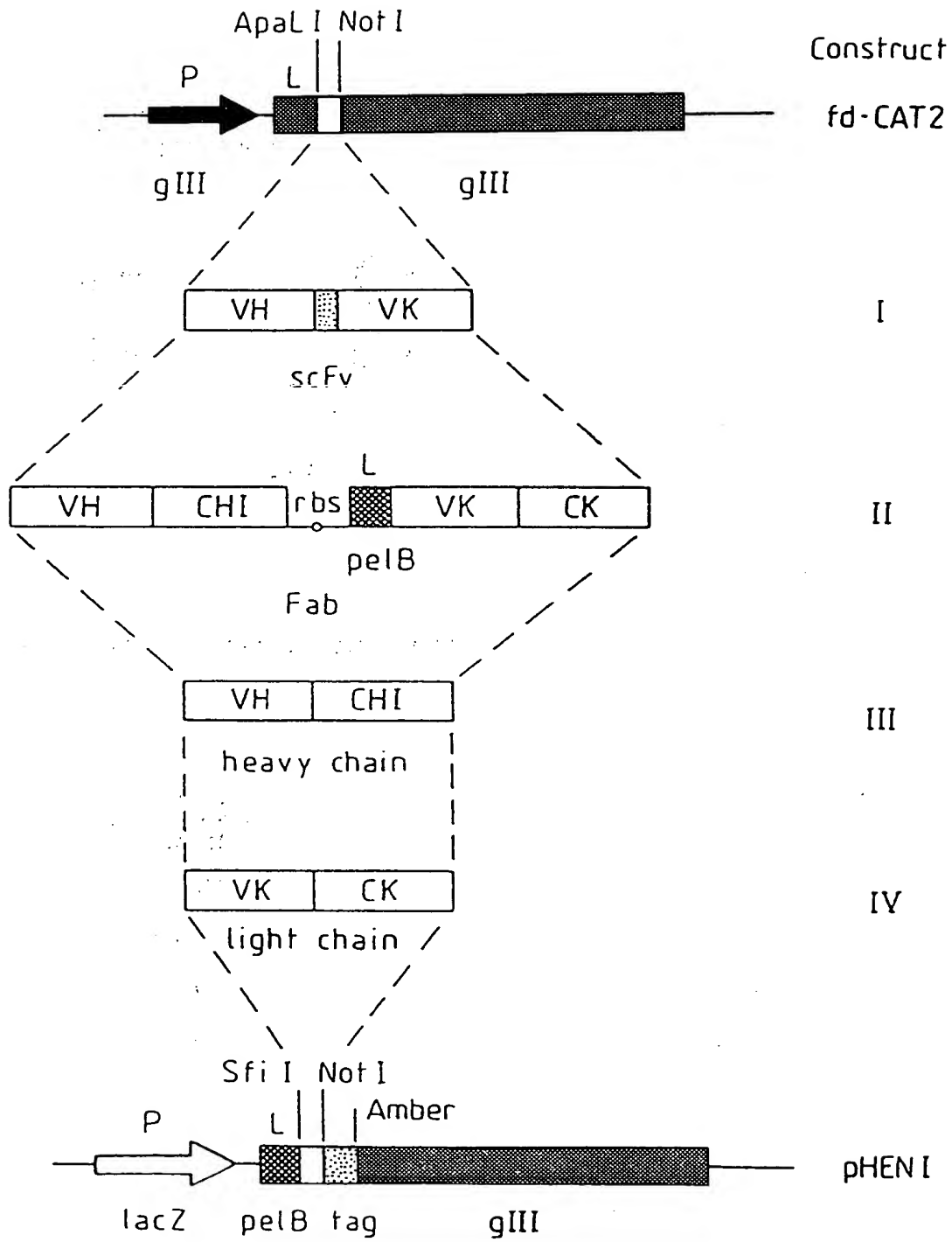
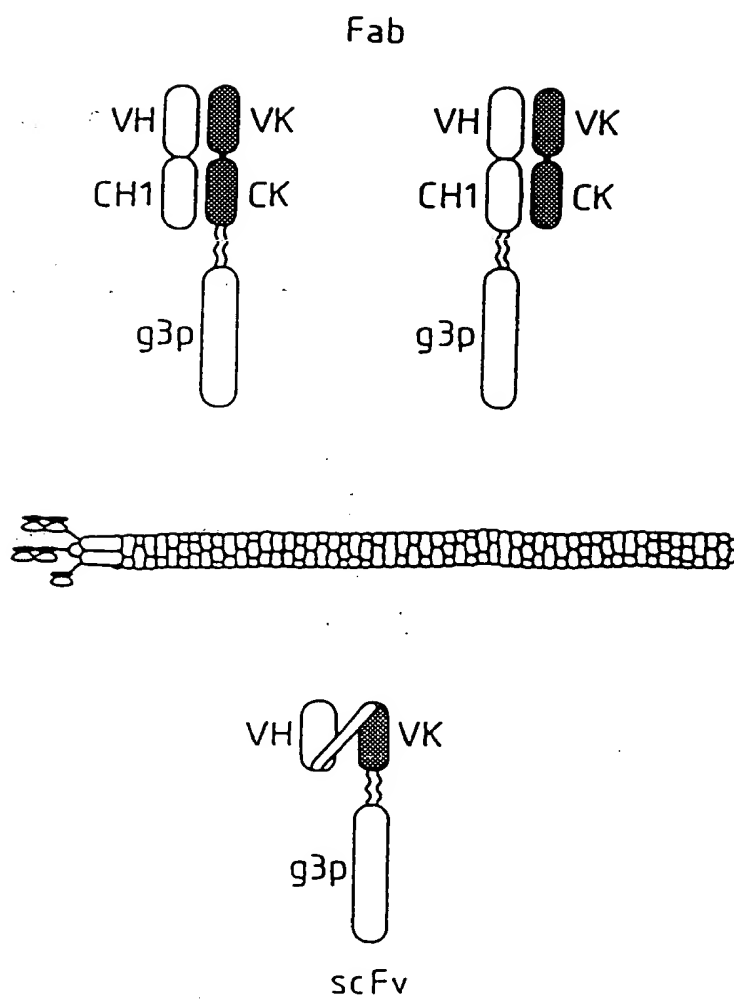


Fig.27.



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Fig.28.



bioRxiv preprint doi: <https://doi.org/10.1101/000000>; this version posted May 1, 2014. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

Fig.29.

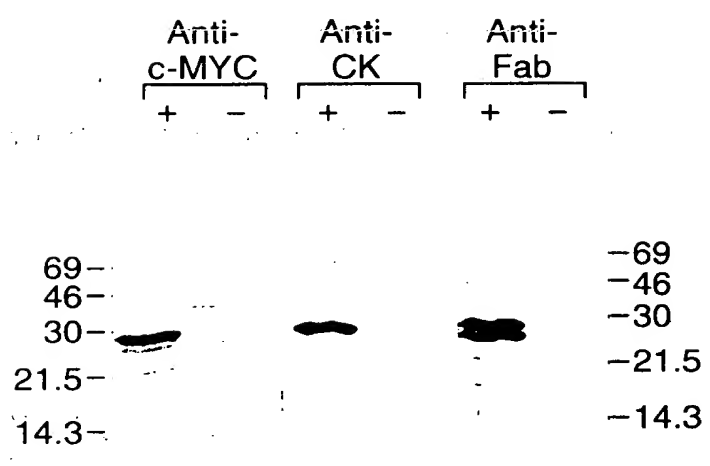


Fig.30.

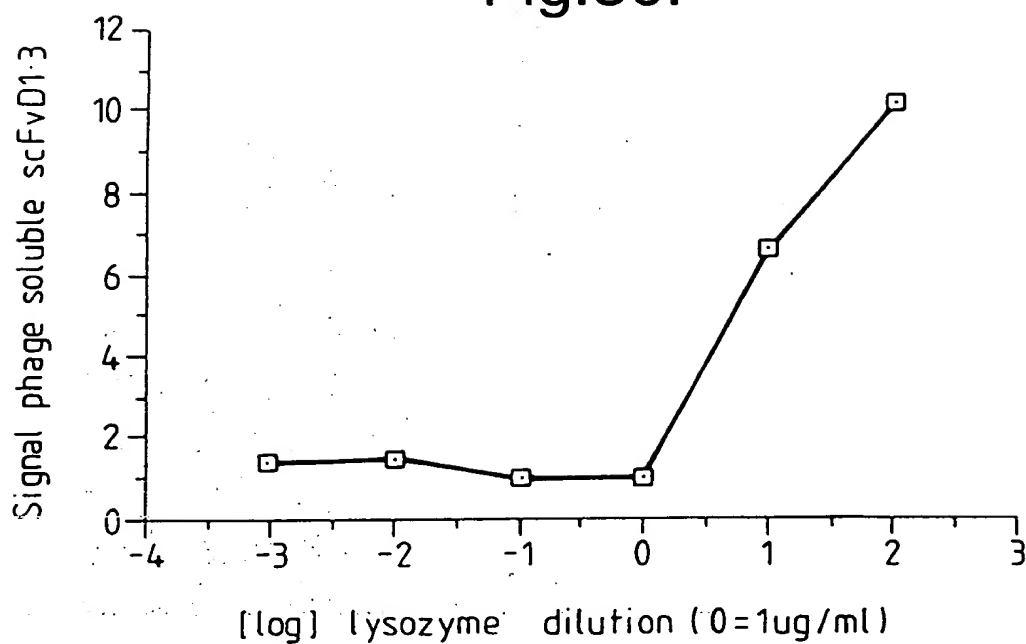


Fig.31.

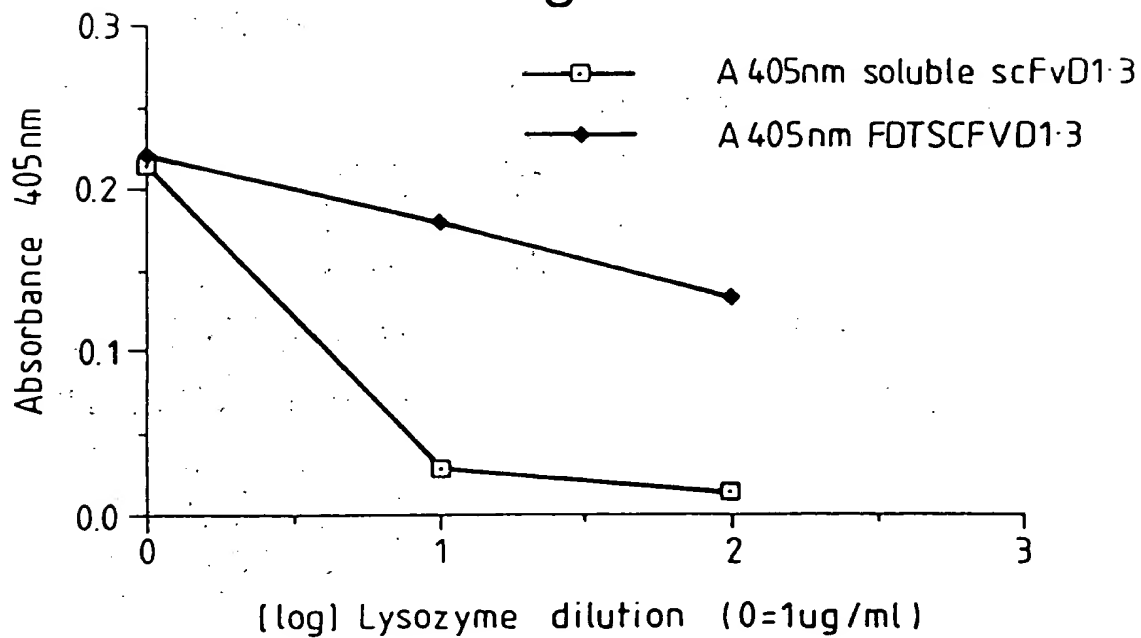


Fig.32.

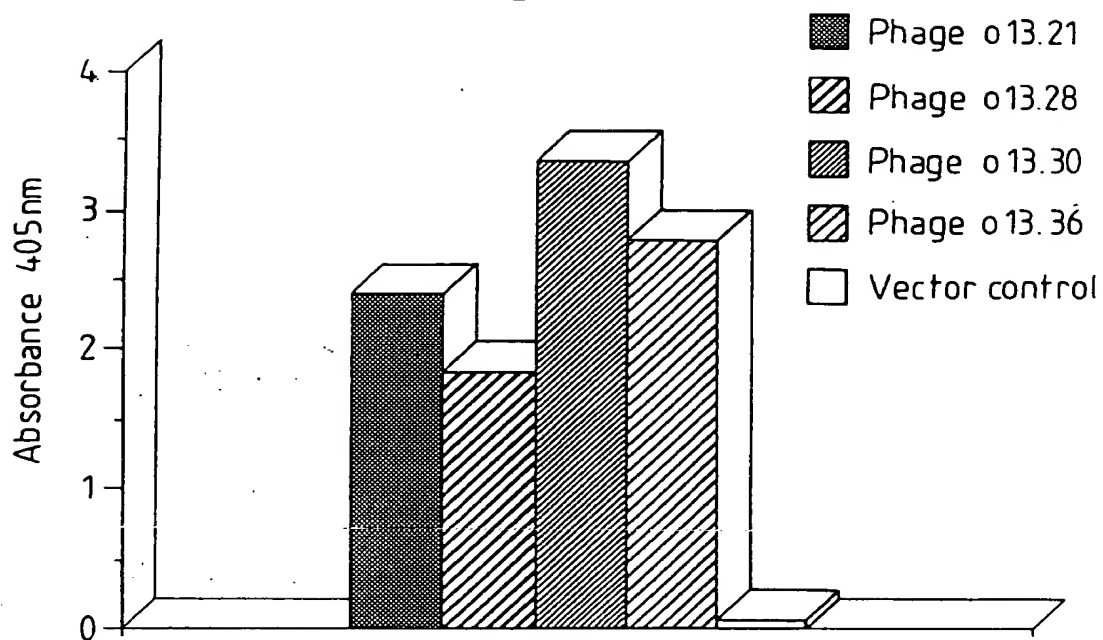


Fig.33.

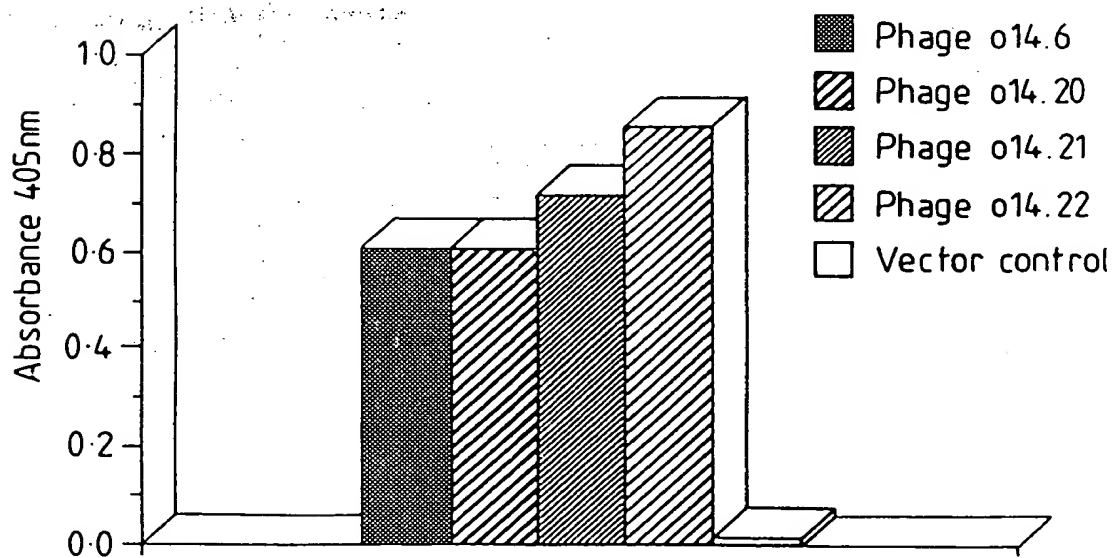


Fig.34.

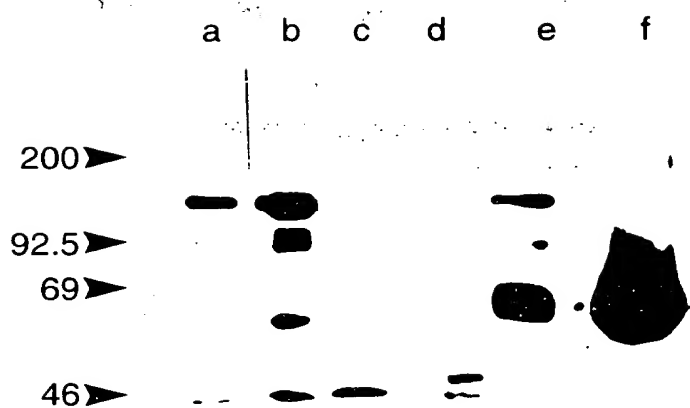


Fig.35A.

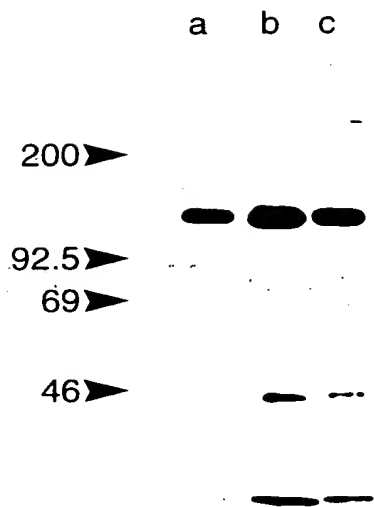


Fig.35B.

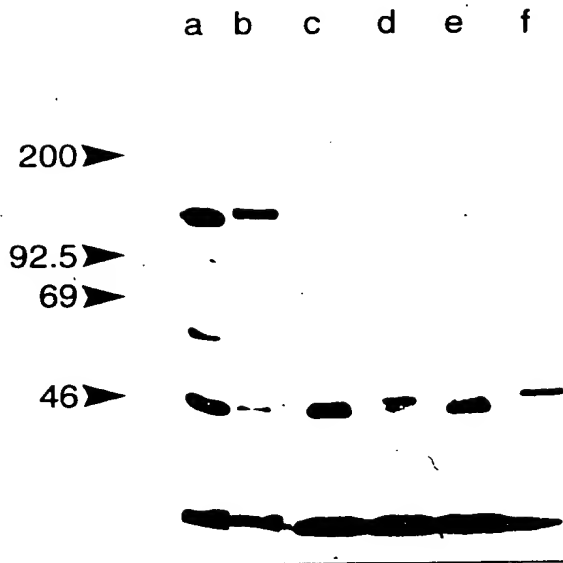


Fig.36.

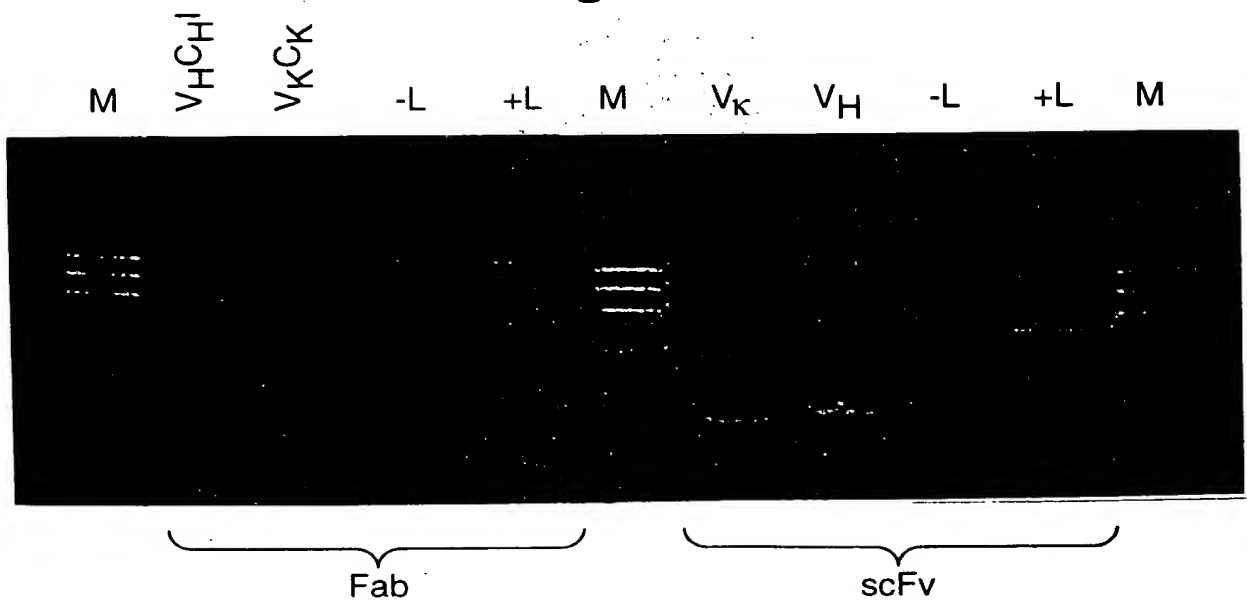


Fig.37.

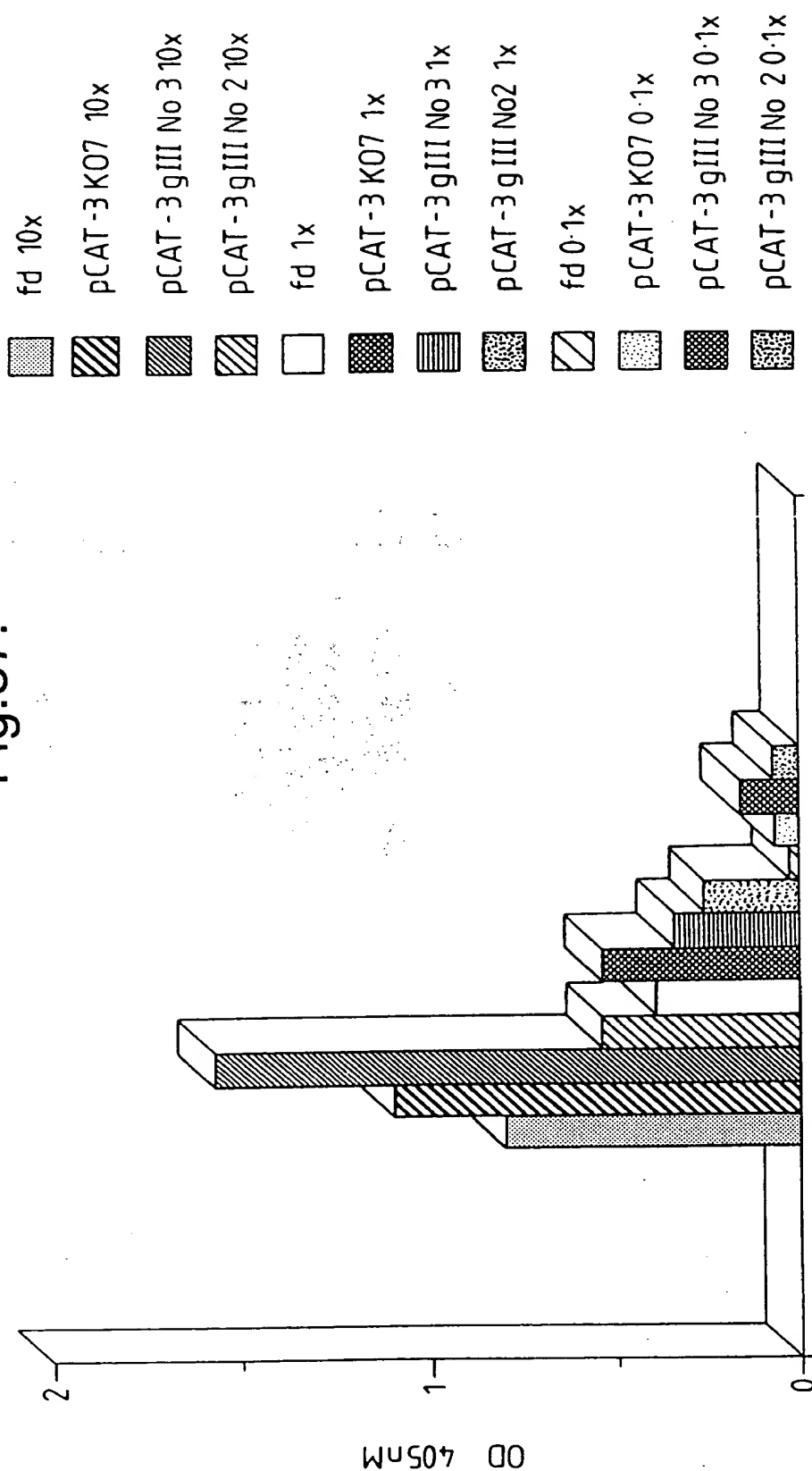


Fig.38A.



Fig.38B.

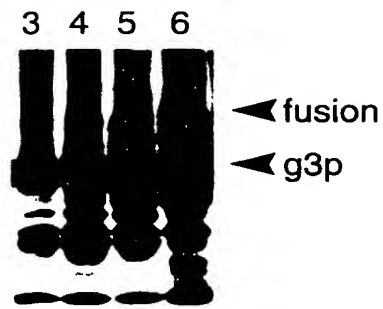


Fig.39.

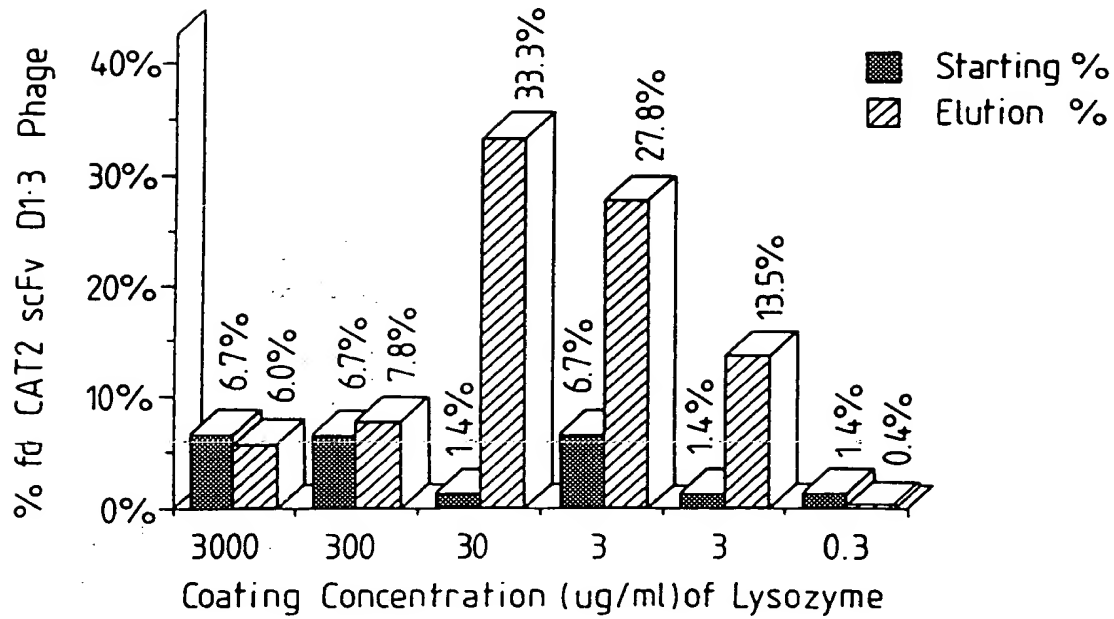


Fig.40.

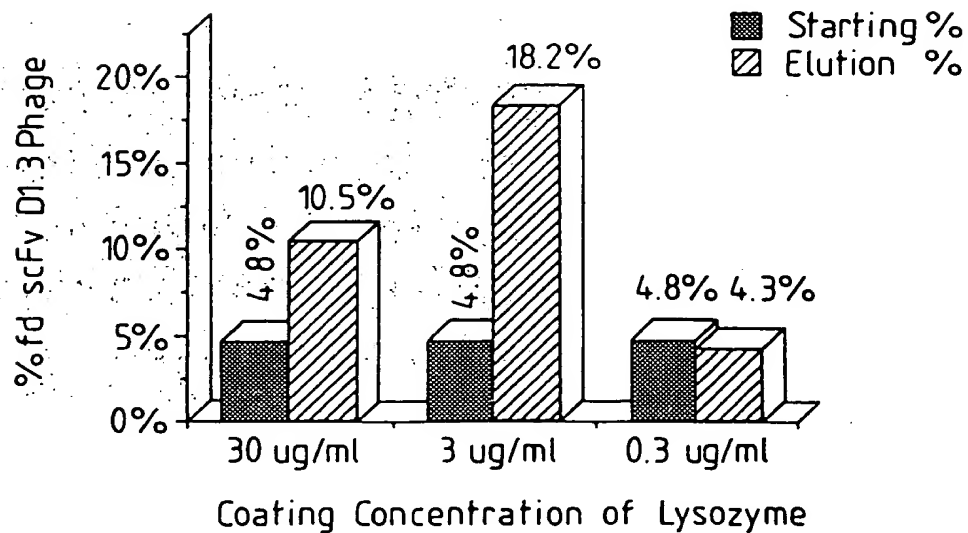


Fig.41.

1 2

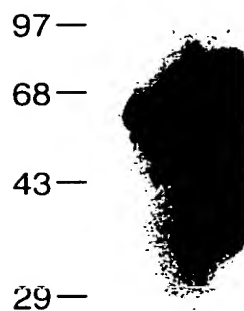


Fig.42.

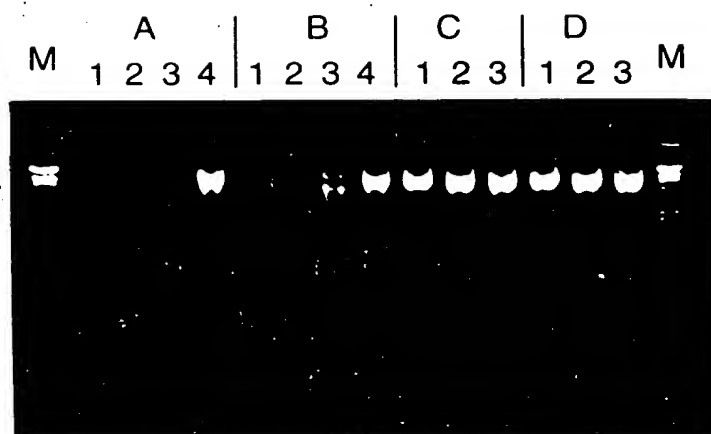
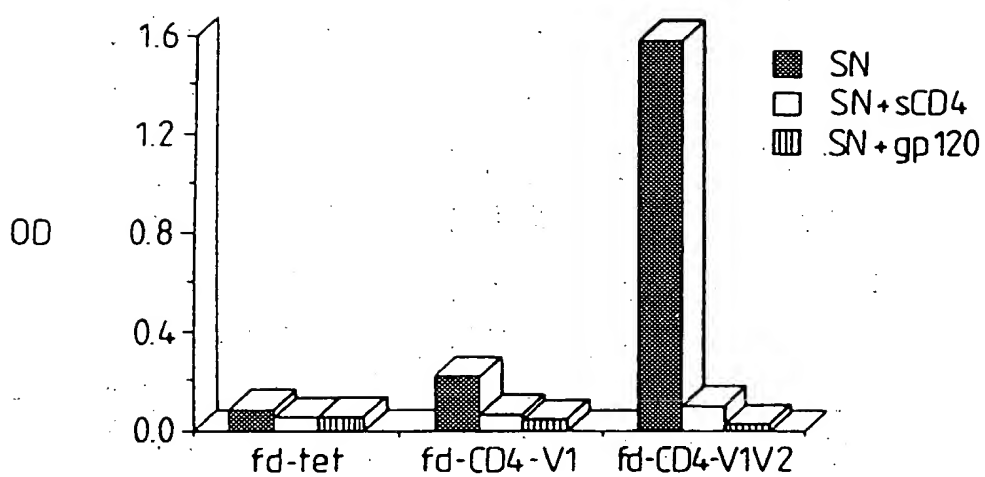


Fig.43.



640 650 660 670 680 690 700 710 720
GGAGACAAAGGCTGCCCTCACCATCACAGGGGCACAGACTGAGGATGAGGCAATATTTCTGTGCTCTATGGTACAGCAACCATTTGGGTG
CCTCTGTTCCGACGGGAGTGTGTCCTCCCGTGTCTGACTCCTACTCCGTTATATAAGACACAGATACCATGTCTGTTGGTAACCCAC
GlyAspLysAlaAlaLeuThrIleThrGlyAlaGlnThrGluAspGluAlaIleTyrPheCysAlaLeuTrpTyrnberAsnHisTrpVal

730 740 750 760 770
TTCGGTGAGGAAACAACCTGACTGTCTCTCGAGATCAACGGCGGCCCGC
AAGCCACCTCCTTGTTGACTGACAGGAGCTCTAGTTTGCCCGCCGGCG
PheGlyGlyGlyThrLysLeuThrValLeuGluIleLysArgAlaAla

Fig.45.

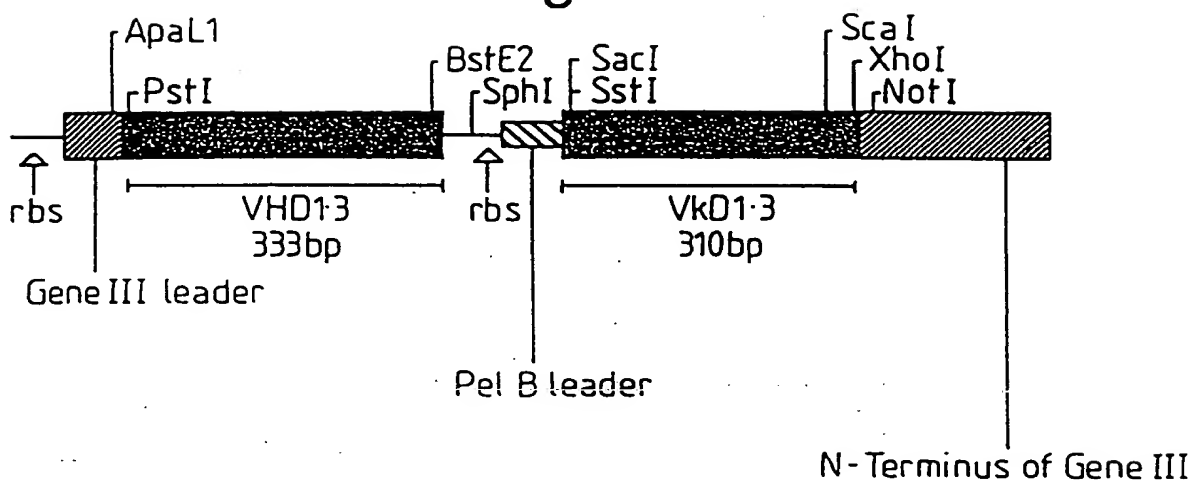


Fig.46.

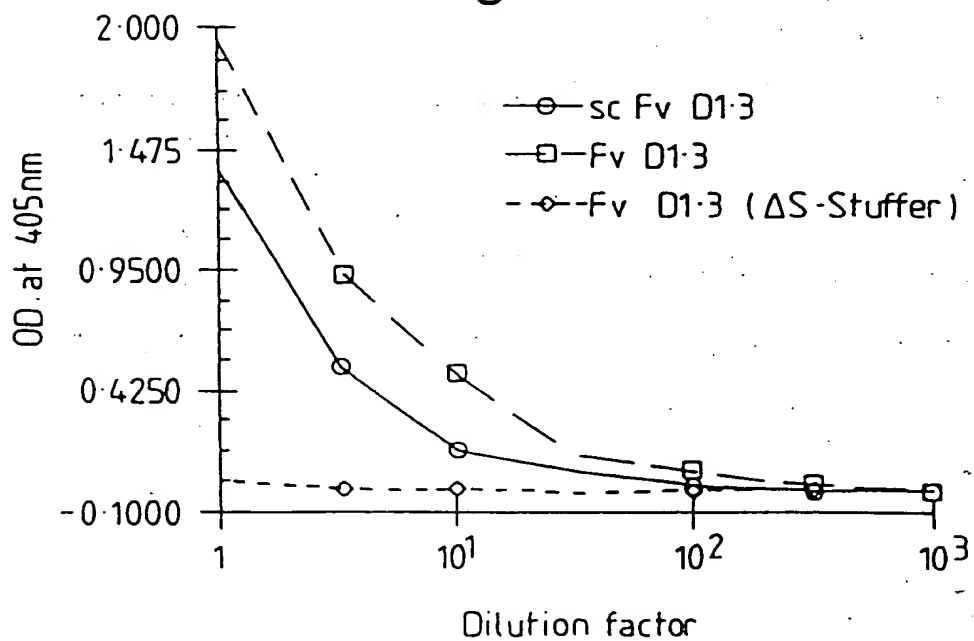


Fig.47.

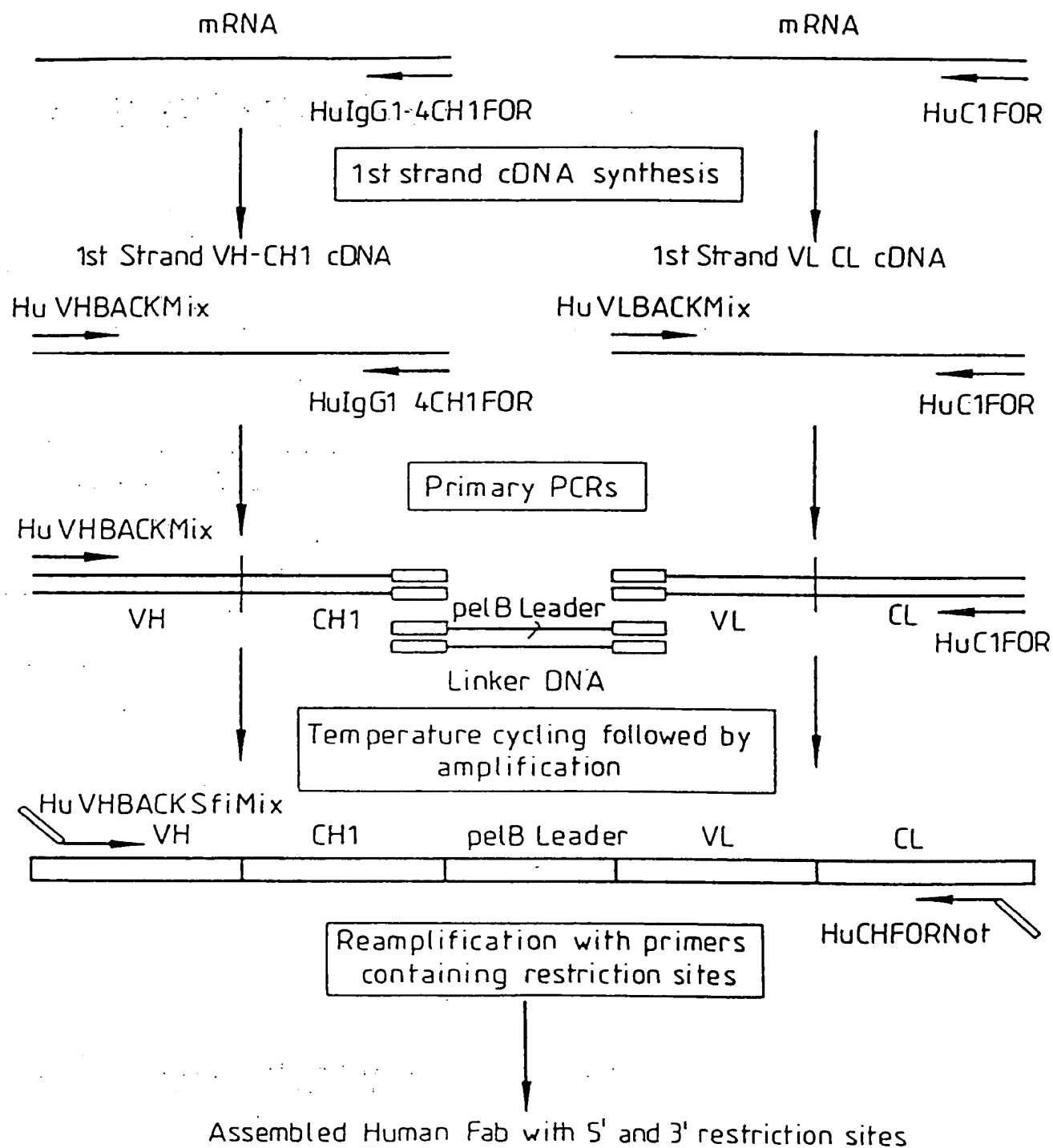


Fig.48(i)

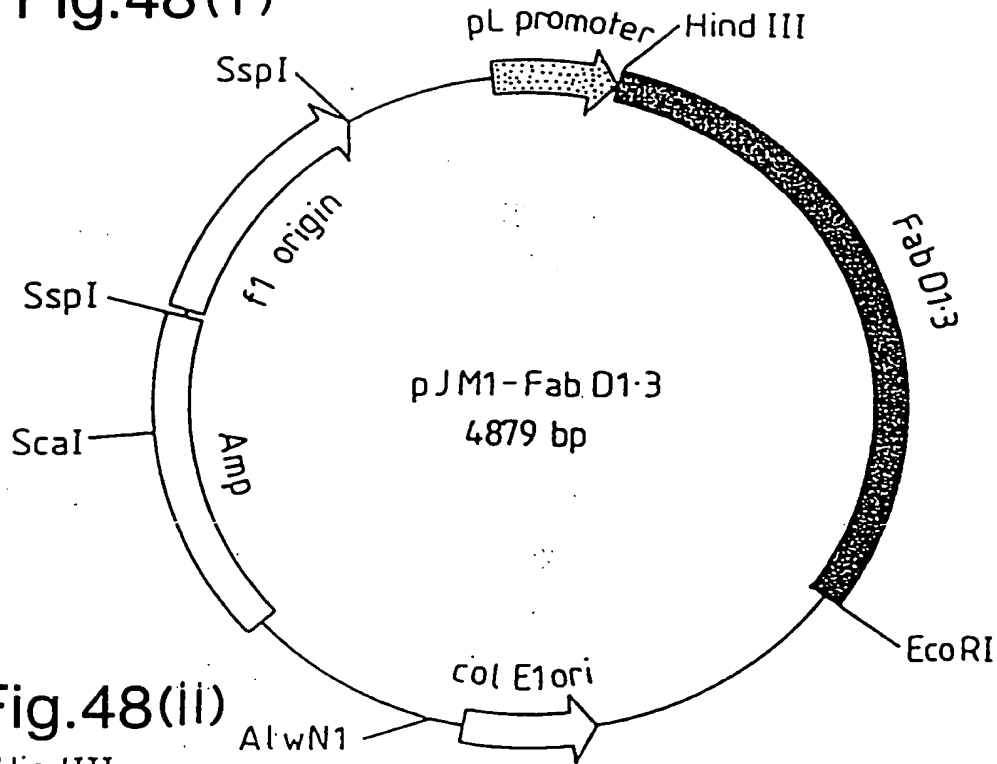


Fig.48(ii)

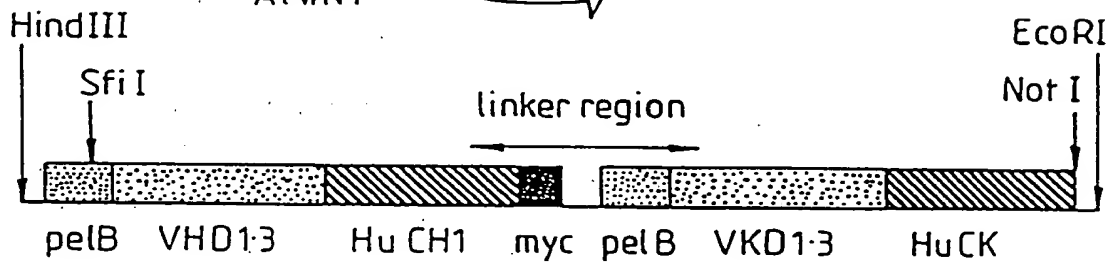


Fig.48(iii)

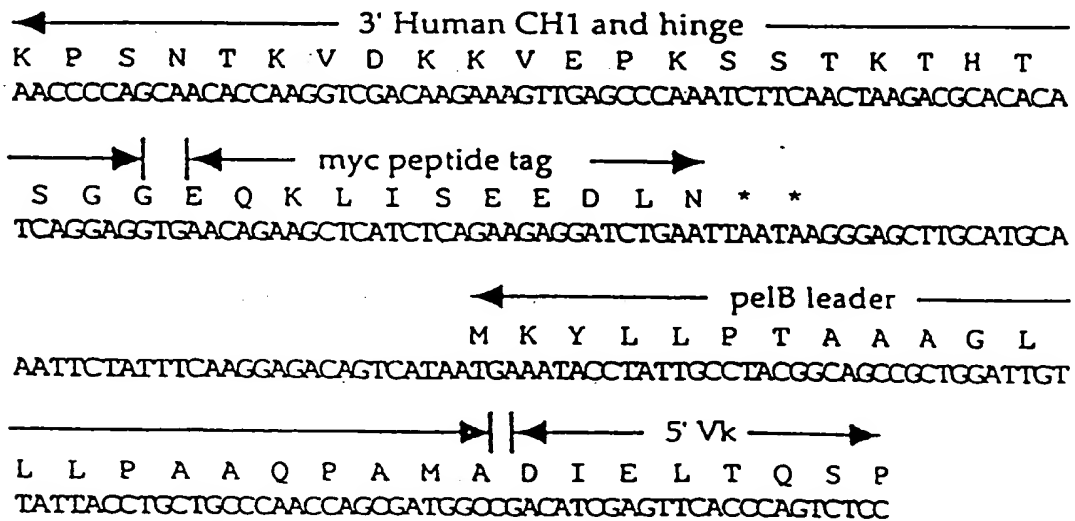
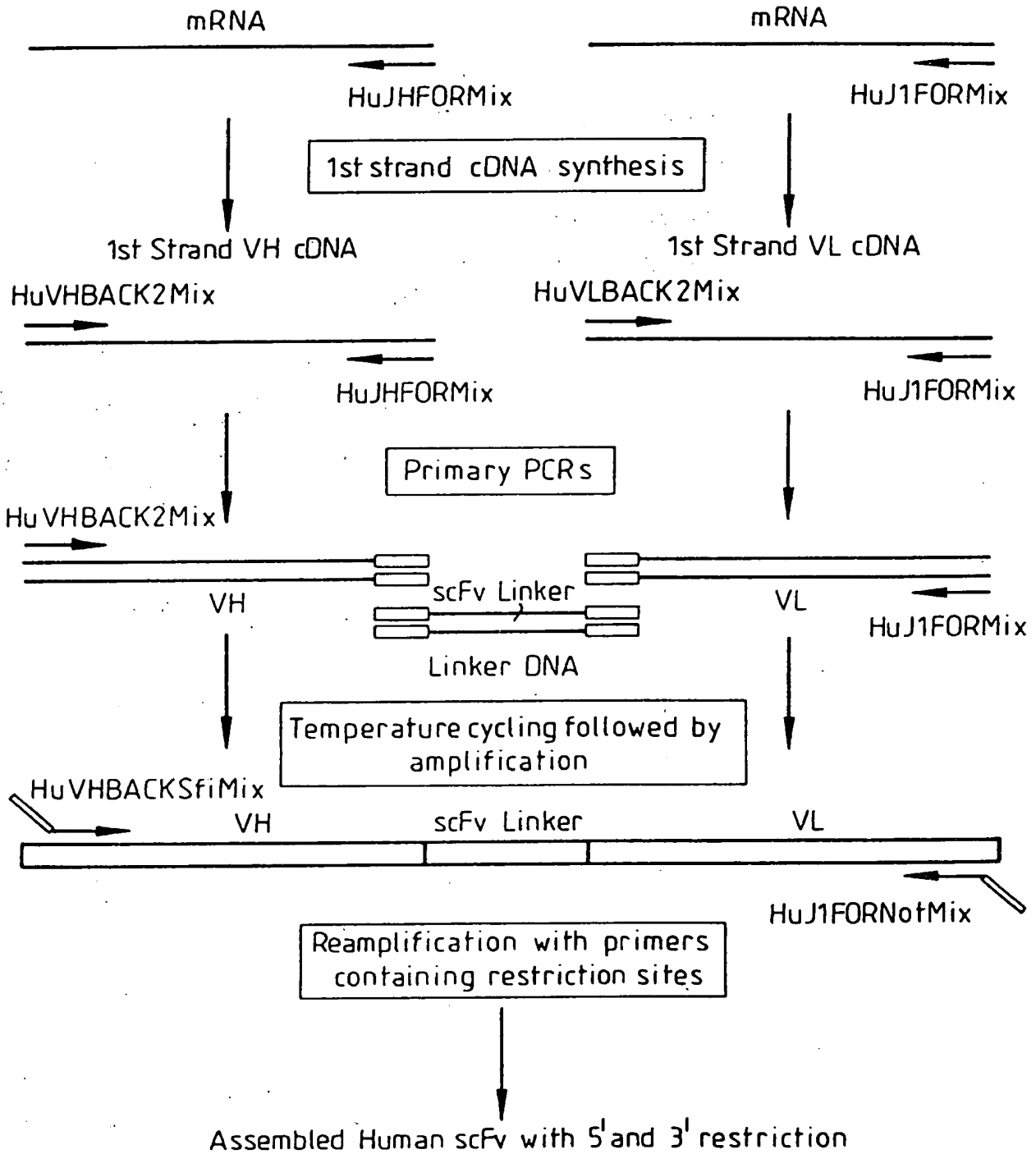
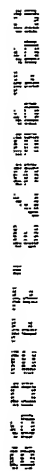


Fig.49.



[illegible]

$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$

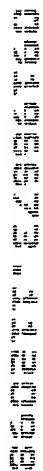


Fig.52.

	CDR 1	CDR 2
D1.3	DIQMTQSPASLSASVGETVTITCRASGNIHNYLA	WYQQKQKSPQLLVYTTTLAD
M1F	DIELTQSPSSLASLGERVSLTCRASQDIGSSLN	WLQQEPDGTIKRLIYATSSLDS
M21	DIELTQSPALMAASPGEKVTITCSVSSSISSNLHWYQQKSETSPKPWIYGTSNLAS	

	CDR 3
D1.3	GVPSRFSGSGGTQYSLKINSLQPEDFGSYQCQHFWSVTPRTFGGGTKLEIKR
M1F	GVPKRFSGSRGSDYSLTISSESEDFVDYVCLQYASSPWTFGGGTKLELKR
M21	GVPVRFSGSGGTSYSLTISSEAEADAATYCCQWSSYPVLTFGAGTKLEIKR

Fig.51.

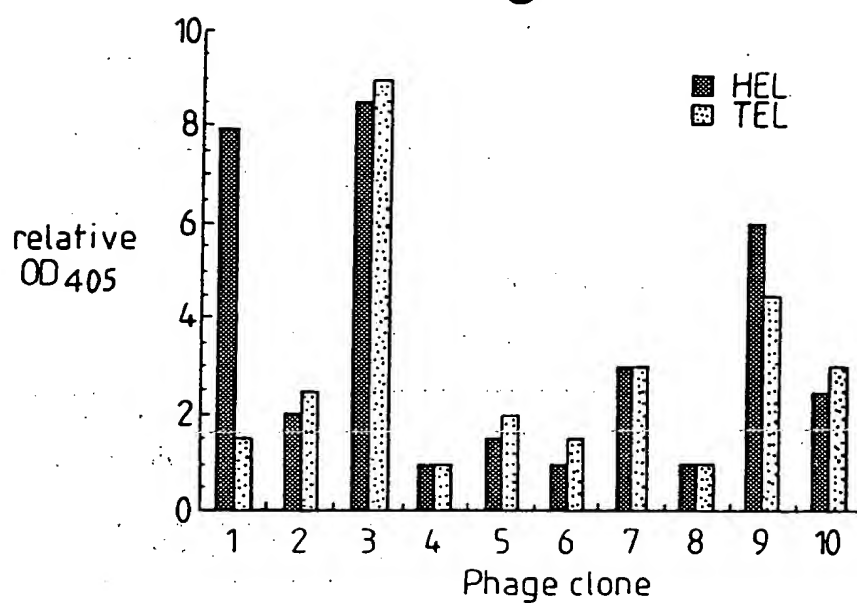


Fig.53.

